

INVITATION FOR BIDS



Howard County, Maryland
OFFICE OF PURCHASING
6751 Columbia Gateway Drive, Suite 501
Columbia, Maryland 21046

VEHICLE, TRANSPORTER FOR PLATFORM ON DEMAND (POD)

BID NUMBER: 2010-63
Opening: June 9, 2010 @ 11:00 a.m.

Evangeline Bolder, CPPB, Buyer
(410) 313-6373
ebolder@howardcountymd.gov



MINORITY BUSINESS ENTERPRISES:

YOU ARE ENCOURAGED TO RESPOND TO THIS SOLICITATION. ASK QUESTIONS FOR CLARIFICATION OR IF AN EXPLANATION IS REQUIRED. FOR MORE INFORMATION, PLEASE CONTACT JACKIE DONALDSON-GREY, EQUAL BUSINESS OPPORTUNITY COORDINATOR, AT 410-313-3694.

IMPORTANT NOTICE

Addenda to solicitations often occur prior to bid opening (sometimes within as little as 48 hours). It is the potential Contractor's responsibility to frequently visit the Office of Purchasing web site (www.howardcountymd.gov/purchasing) to obtain Addenda.

Formal IFBs and IFB Results are available on the Website:
www.howardcountymd.gov/purchasing

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IMPORTANT: ADVISE THE OFFICE OF PURCHASING IMMEDIATELY IF ANY OF THE
ABOVE DOCUMENTS ARE NOT ENCLOSED.

REVISED 04/08/10

DOCUMENT A

TERMS AND CONDITIONS APPLYING TO PURCHASE ORDERS

- 1 No purchase of materials, supplies, equipment, and/or services will be recognized unless made through the Office of Purchasing.
- 2 The County may at any time insist upon strict compliance with these terms and conditions, notwithstanding any previous custom, practice or course of dealing to the contrary.
- 3 The terms and conditions of sale as stated in this order govern in the event of conflict with any terms of seller's bid, and are not subject to change by reason of any written or verbal statements by seller or by any terms stated in seller's acknowledgement, unless accepted in writing by the County.
- 4 If price is omitted on order, except where order is given in acceptance of quoted prices, it is agreed that seller's price will be the lowest prevailing market price and in no event is this order to be filled at higher prices than last previously quoted or charged without the County's written consent.
- 5 When requested, seller will acknowledge order promptly and state when delivery will be made.
- 6 Invoices must show point of delivery and purchase order number, and indicate if partial or complete billing. Separate invoices must be rendered for each purchase order.
- 7 The County has the right to refuse to make payment on any invoice unless and until presented by seller with the receipt, signed by the County, covering the invoiced material. The County's payment for any material shall not constitute acceptance of the material or a waiver of any of the County's rights hereunder.
- 8 No freight or delivery charges will be paid by the County unless specifically provided in the purchase order.
- 9 The County will not pay for packaging, boxing or cartage. Damage resulting from improperly package material will be charged to the seller.
- 10 Time is of the essence on this order. The County reserves the right to cancel this order or, any part thereof, without obligation, if delivery is not made or services completed at time(s) specified.
- 11 This contract shall be governed and construed in accordance with the law of the State of Maryland.
- 12 All deliveries and services furnished under this Purchase Order must be of the quality specified or in the event no quality is specified, must be the best of their respective kinds, and will be subject to inspection and approval of the County within a reasonable time after delivery of goods or completion of services. When manufacturing specifications are referred to in this Purchase Order, such specifications shall be deemed to be an integral part hereof as if duly set out herein. Goods and services shall be replaced at no additional charge to the County if they prove to be defective and/or not in accordance with specifications. Rejected materials shall be returned at the risk and expense of the seller. If the County does not desire replacement, seller is to issue a full credit.

- 13 Requirement as to Materials, Seller's Responsibilities and Warranties: Seller warrants and agrees that all materials supplied hereunder shall be manufactured and produced in compliance with the laws, regulations, codes, terms, standards and/or requirements of Underwriters Laboratories Inc., all Federal, State and local authorities and all other authorities having jurisdiction, and that performance of this order shall be in accordance with the above laws, regulations, codes, terms, standards, and/or requirements, and agrees upon request to furnish the County a certificate of compliance in such forms as the County may require.
- 14 The quantity of materials, and/or services, must not be exceeded without the authority in writing being first obtained from the Office of Purchasing.
- 15 Substitutions are not allowed, unless specifically authorized by the County.
- 16 If required, a sufficient number of shop drawings and/or catalog data shall be furnished to the County within 15 days (unless otherwise specified) for necessary approval.
- 17 Seller warrants that there has been no violation of copyrights or patent rights in manufacturing, producing, or selling the goods shipped or ordered and seller agrees to hold the County harmless from any and all liability, loss or expense occasioned by such a violation.
- 18 All goods shipped against this order must be produced in compliance with the requirements of the Fair Labor Standards Act of 1938, as amended including Section 6, 7 and 12, and regulations and orders issued under Section 14 thereof.
- 19 In the event any article sold and delivered hereunder shall be defective in any respect whatsoever, seller will indemnify and save harmless the County from all losses or expenses by reason of all accidents, injuries or damages to persons or property resulting from the use of such article or which are contributed to by said defective condition.
- 20 If Seller performs services or constructs, erects, inspects or delivers on the County's premises, seller will indemnify and save harmless buyer from all loss or expense by reason of any accident, injury or damage to persons or property occurring in connection with the Purchase Order.
- 21 Liability for Damage: If this order calls for work to be performed upon property owned or controlled by the County it is understood and agreed that: Mechanic's Liens: The Seller will keep the premises and work free and clear of all mechanic's liens, and furnish the County certificate and waiver as provided by law. Casualty Losses: The work will remain at the seller's risk prior to written acceptance by the County and the seller will replace at his own expense all work damaged or destroyed by fire, force or violence of the elements or any cause whatever. Injury to Employees: The seller will indemnify, save harmless and defend the County from all liability for loss, damage or injury to person or property in any manner arising out of or incident to the performance of this contract. Workmen's Compensation: The seller will indemnify, save harmless and defend the County from any and all claims, demands or suits made or brought against the County on account of any of the terms or provisions of the Workmen's Compensation Law of the State in which said work is to be performed, effective on the date of the Purchase Order and subsequent amendments.
- 22 Bankruptcy: In the event of any proceedings, voluntary or involuntary, in bankruptcy or insolvency by or against the seller including any proceedings under the Chandler Act, or in the event of the appointment, with or without seller's consent, of an assignee for the benefit of creditors or of a receiver then the County shall be entitled to cancel any unfilled part of this Purchase Order without any liability whatsoever.

- 23 Equal Employment Opportunity: The County requires that the seller not discriminate against any employee or applicant for employment because of race, creed, religion, physical or mental handicap, color, sex, national origin, age, occupation, marital status, political expression, sexual orientation or personal appearance. The seller will take affirmative action to ensure that applicants are employed, and the employees are treated during employment with regard to the above. The seller warrants that, within the previous 12 months, he has not engaged in unlawful employment practices as set forth in Section 12.208 of the Howard County Code, Section 19 of Article 49B of the annotated Code of Maryland or Sections 703 and 704 of Title VII of the Civil Rights Act of 1964.
- 24 Material Safety Data Sheet: If the work to be performed under this contract requires the use of any product that contains any ingredient that could be hazardous or injurious to a person's health, a Material Safety Data Sheet (MSDS) must be provided to the Office of Purchasing, 6751 Columbia Gateway Drive, Suite 501, Columbia, Maryland 21046.
- 25 Terminations:
- Termination for Convenience: The County may terminate a contract, in whole or in part whenever the County determines that such termination is in the best interest of the County, without showing cause, upon giving written notice to the Contractor. The County shall pay all reasonable costs incurred by the Contractor up to the date of termination. However, in no event shall the Contractor be paid any amount that exceeds the price proposed for the work performed. The Contractor will not be reimbursed for any profits which have been anticipated but which have not been earned up to the date of termination.
- Termination for Default: When the Contractor has not performed or has unsatisfactorily performed the contract, the County may terminate the contract for default. Upon termination for default, payment may be withheld at the discretion of the County. Failure on the part of a Contractor to fulfill the contractual obligations shall be considered just cause for termination of the contract. The Contractor will be paid for work satisfactorily performed prior to termination less any excess costs incurred by the County in reprocurring and completing the work.

DOCUMENT B

GENERAL CONDITIONS

- 1 INSTRUCTIONS, FORMS, AND SPECIFICATIONS: Instructions, forms, and specifications may be obtained from the Office of Purchasing, <http://howardcountymd.gov/Purchasing>, or by: PHONE (410) 313-6370, FAX (410) 313-6388, TDD (410) 313-2323, Monday through Friday
 - 1.1 All bids are to be submitted on and in accordance with forms for these purposes which are available at the Office of Purchasing and the Internet at: <http://howardcountymd.gov/Purchasing> . Additional supplementary documentation when requested shall be submitted on the Contractor's letterhead.
 - 1.2 All bids must be clearly identified on the front of the envelope or top of the carton with the solicitation number, title of the solicitation and the due date and time.
 - 1.3 All bids must be signed by an authorized officer or agent of the company submitting the bid and delivered in sealed envelopes or cartons to the Office of Purchasing, Gateway Building, 6751 Columbia Gateway Drive, Suite 501, Columbia, Maryland 21046 no later than the time and date indicated. Bids received after the time and date indicated will not be considered.
 - 1.4 Each bid shall be accompanied by an affidavit regarding price fixing, gratuities, bribery, and discriminatory employment practices in accordance with Section E.1.c. (3)(b) of the Howard County Purchasing Manual. When the Contractor is a corporation, a duly authorized representative of said corporation shall execute the affidavit. Affidavit forms are provided in the solicitation package.
 - 1.5 Additional information or clarification of any of the instructions or information contained herein may be obtained from the Office of Purchasing.
 - 1.6 Any Contractor who finds a discrepancy in or omission from the specifications, or is in doubt as to their meaning, or feels that the specifications are discriminatory, shall notify the County Purchasing Agent in writing not later than five days prior to the scheduled opening of bids. Exceptions taken do not obligate the County to change the specifications. The County Purchasing Agent will notify all Contractors of any changes, additions or deletions to the specifications by addenda posted on the Office of Purchasing web site (www.howardcountymd.gov/purchasing). Addenda to solicitations often occur prior to bid opening (sometimes within as little as 48 hours). It is the potential Contractor's responsibility to frequently visit the Office of Purchasing web site to obtain addenda.
 - 1.7 The County will assume no responsibility for oral instructions or suggestions. All official correspondence in regard to the specifications shall be directed to and will be issued by the County Purchasing Agent. Bids may not be withdrawn during this period.
 - 1.8 Unless otherwise specified, all formal bids submitted shall be irrevocable for four months following bid opening date, unless the Contractor(s), upon request of the County Purchasing Agent, agree to an extension.

2 BID DEPOSIT

- 2.1 When deemed necessary by the County Purchasing Agent, bid deposits shall be prescribed in public notice inviting bids. Such bid deposits shall be in the amount deemed adequate by the County Purchasing Agent. The deposit shall be a certified check, cashier's check, or treasurers check drawn upon a solvent clearing house bank, or a bid bond issued by an insurance company licensed to do business in Maryland made payable to Director of Finance, Howard County, Maryland. A combination of certified check and bid bonds is not an acceptable response to the bid deposit requirement.
- 2.2 Bid deposits (certified checks) will be returned to the unsuccessful Contractors upon the award of the contract(s), and to the successful Contractor(s) upon execution of the contract(s) and the meeting of bond requirements, if applicable.
- 2.3 The successful Contractor's failure to execute the contract or meet bond requirements within ten working days after the award shall result in the deposit being forfeited to the County as liquidated damages.

3 RESERVATIONS:

- 3.1 The County Purchasing Agent reserves the right to reject any or all bids or parts of bids when, in the County Purchasing Agent's reasoned judgment, the public interest will be served thereby.
- 3.2 The County Purchasing Agent, with the approval of the County Executive, may waive formalities or technicalities in bids as the interest of the County may require.
- 3.3 The County Purchasing Agent reserves the right to increase or decrease the quantities to be purchased at the prices proposed. The quantity intended to be purchased and the period and percentage amount of any such reservation will be stated in the specifications or bid.
- 3.4 The County Purchasing Agent reserves the right to award contractors or place orders on a lump sum or individual item basis, or such combination as shall, in the County Purchasing Agent's judgment, be in the best interest of the County.
- 3.5 The County Purchasing Agent may waive minor differences in specifications provided these differences do not violate the specification intent nor materially affect the operation for which the item or items are being purchased, nor increase estimated maintenance and repair cost to the County.

4 DELIVERY:

- 4.1 Contractors shall guarantee delivery of supplies in accordance with such delivery schedule as may be provided in the specifications and bid.
- 4.2 All items shall be delivered F.O.B. Destination, Inside Delivery, and delivery costs and charges included in the bid unless otherwise stated in the specifications or bid.
- 4.3 The County Purchasing Agent reserves the right to charge the Contractor or vendor for each day the supplies or services are not delivered in accordance with the delivery schedule. The per diem charge may be invoked at the discretion of the County Purchasing Agent and said sum to be taken as liquidated damages and deducted from the final payment, or charged back to the Contractor or vendor.

- 4.4 The County Purchasing Agent reserves the right to procure the supplies/services elsewhere on the open market if delivery is not made as specified, in which event, the extra cost of procuring the supplies/services may be charged against the Contractor and deducted from any monies due or which may become due him.
- 5 COMPETITION:
 - 5.1 The name of any manufacturer, trade name, or manufacturer or vendor catalog number mentioned in specifications and bid pages is for the purpose of designating a minimum standard of quality and type and for no other. Such references are not intended to be restrictive. Bids will be considered for any brand which meets or exceeds the quality of the specifications listed for any item unless otherwise stated in the specifications or bid.
 - 5.2 A Contractor may offer only one price on each item though they may have two or more types that meet specifications. Contractors must determine for themselves which to offer. Submission by a single Contractor of more than one price for a single item shall be sufficient cause for rejection of all prices for that item submitted by the Contractor.
 - 5.3 Bids which show any omission, irregularity, alteration of forms, additions not called for, conditional or unconditional unresponsive bids, obviously unbalanced may be rejected.
 - 5.4 All bids must be accompanied by descriptive literature as may be called for by the specifications or bid. Specifications provided are based on County needs and uses, estimated costs of operation and maintenance, and other significant and/or limiting factors to meet County requirements and shall be consistent with County policies. Minimum specifications and maximum specifications, where included, are not established arbitrarily to limit competition or to exclude otherwise competitive Contractors.
- 6 PROTEST: Any protest concerning the award of a contract shall be decided by the Purchasing Agent. Protests shall be made in writing to the Office of Purchasing and shall be filed within ten days of issuance of award notification. A protest is considered filed when received by the Office of Purchasing. The written protest shall include the name and address of the protestor, identification of the procurement, a statement of the specific reasons for the protest and supporting exhibits. The Office of Purchasing will respond to the written protest within ten days. The County Purchasing Agent's decision relative to the protest shall be final.
- 7 DISPUTES: In cases of disputes as to whether or not an item or service quoted or delivered meets specifications, the decision of the County Purchasing Agent, or authorized representatives, shall be final and binding on all parties. The County Purchasing Agent may request, in writing, the recommendation of the head of the County agency using the item or other objective sources.
- 8 AUTHORITY: Instructions, specifications, and bids are issued, and all bids, quotations, orders, and purchases are made pursuant and subject to the provisions of Article VIII, Howard County Charter; Sections 4.100 through 4.123, Howard County Code, 2003; and the rules and regulations as prescribed by the County Purchasing Agent.
- 9 EXCEPTIONS: The submission of a bid shall be considered an agreement to all the terms, conditions, and specifications provided herein and in the various bid documents, unless specifically noted otherwise in the bid.

- 10 CASH DISCOUNTS: Cash discounts will be taken into consideration in determining the award. However, an offer of a cash discount must allow a reasonable period of not less than 30 days in order to be included in evaluation of bid pricing. A bid offering a cash discount in a period of less than 30 days will be evaluated as a bid without a cash discount offer. Should this Contractor obtain an award by reason of their gross price, the County will hold the offer of a cash discount and make every effort to obtain the discount.
- 11 UNIT PRICES: Unless clearly shown on the bid that it is the intent that a reduced total price is being offered on the basis of receiving an award of all items covered by the total, any totals should be the actual sum of the extension of unit prices. Otherwise, in the event of any discrepancy between a unit price(s), extended price(s), and/or total price(s), unit prices will govern and the bid will be refigured accordingly.
- 12 NON-WAIVER: Any waiver of any breach of covenants herein contained to be kept and performed by the Contractor shall not be deemed or considered as a continuing waiver and shall not operate to bar or prevent the County from declaring a forfeiture for any succeeding breach either of the same condition of covenant or otherwise.
- 13 PATENTS: The Contractor shall defend any suit or proceeding brought against the buyer so far as based on a claim on any equipment, or on any part thereof, furnished under this contract which constitutes an infringement of any patent of the United States, if notified promptly in writing and given authority, information and assistance (at the Contractor's expense) for the defense of same, and the Contractor shall pay all damages and costs awarded therein against the County. In case said equipment or any part thereof, in such suit held to constitute infringement and the use of said equipment of part if enjoined, the Contractor shall, at its own expense, either procure for the County the right to continue using said equipment or part, or replace same with non-infringing equipment, or modify so that it becomes non-infringing.
- 14 GOVERNING LAW:
 - 14.1 This Agreement shall be governed by and construed in accordance with the laws of the State of Maryland without regard to any choice of law principles that would dictate the laws of any other jurisdiction. The parties agree that the exclusive venue for any and all actions related hereto shall be the appropriate Federal or State court located within the State of Maryland.
 - 14.2 The laws of Maryland and Howard County shall govern the resolution of any issue arising in connection with the contract, including, but not limited to, all questions on the validity of the contract, the capacity of the parties to enter therein, any modification or amendment thereto, and the rights and obligations of the parties hereunder.
 - 14.3 Contractors must be registered to do business in, and must be in good standing in, the State of Maryland. Contractors not registered must obtain registration information from the Maryland Department of Assessments and Taxation (DAT) website at: www.dat.state.md.us/ or by calling at (410) 767-1340 or Toll Free (888) 246-5941.
- 15 COMPLIANCE WITH LAWS: In addition to any other remedy available to the County, breach of any of the paragraphs of this clause shall, at the election of the County, be grounds for termination. Failure of the County to terminate the contract shall not be considered or construed as a waiver of such breach nor as a waiver of any rights or remedies granted or available to the County. If awarded a contract, the Contractor hereby represents and warrants that:

- 15.1 It is qualified to do business in the State of Maryland and that it will take such action as, from time to time hereafter, may be necessary to remain so qualified.
 - 15.2 It is not in arrears with respect to the payment of any monies due and owing the County, or any department or agency thereof, including, but not limited to, the payment of taxes and employee benefits, and that it shall not become so in arrears during the term of the contract.
 - 15.3 It shall comply with all Federal, State, and local laws, ordinances, and legally enforceable rules and regulations applicable to its activities and obligations under the contract.
 - 15.4 It shall procure, at its expense, all licenses, permits, insurance, and governmental approvals, if any, necessary to the performance of its obligations under the contract.
 - 15.5 The facts and matters set forth hereafter in the contract and made a part hereof are true and correct.
- 16 HOLD HARMLESS/INDEMNIFICATION:
- 16.1 The Contractor shall indemnify and hold the County harmless from and against all liability and expenses, including reasonable attorney's fees, howsoever arising or incurred, alleging damage to property or injury to, or death of, any person arising out of or attributable to the bidder's performance of the contract awarded, provided that the Contractor shall not be responsible for acts of negligence or willful misconduct committed by the County, its employees, agents and officials.
 - 16.2 Any property or work to be provided by the Contractor under this contract will remain at the Contractor's risk until written acceptance by the County; and the bidder will replace, at Contractor's expense, all property or work damaged or destroyed by any cause whatsoever.
- 17 TERMINATION:
- 17.1 Termination for Convenience: Howard County may terminate a contract, in whole or in part, whenever the County determines that such termination is in the best interest of the County, without showing cause, upon giving at least 30 days written notice to the Contractor. Howard County shall pay all reasonable costs incurred by the Contractor up to the date of termination. However, in no event shall the Contractor be paid an amount which exceeds the price bid for the work performed. The Contractor shall not be reimbursed for any profits which may have been anticipated but which have not been earned up to the date of termination.
 - 17.2 Termination for Default: When the Contractor has not performed or has unsatisfactorily performed one or more material terms of the contract, the County may terminate the contract for default. Upon termination for default, payment may be withheld at the discretion of Howard County. Failure on the part of a Contractor to fulfill the contractual obligations shall be considered just cause for termination of the contract. If the damages exceed the undisbursed sums available for compensation, the County shall not be obligated to make any further disbursements hereunder. The Contractor will be paid for work satisfactorily performed prior to termination less any excess costs incurred by the County in reprocurring and completing the work.

- 18 **AVAILABILITY OF FUNDS:** The contractual obligation of the County under this contract is contingent upon the availability of appropriated funds from which payment for this contract can be made.
- 19 **INTEGRATION:** These bid documents, Contractor's response to this solicitation, and subsequent purchase order(s) to the successful Contractor contain the entire understanding between the parties and any additions or modifications hereto may only be made in writing executed by both parties.
- 20 **NON-ASSIGNMENT OF CONTRACT:** The Contractor shall not assign the contract, or any portion thereof, except upon the written approval of the County Purchasing Agent.
- 21 **AGREEMENT:**
- 21.1 The County and Contractor must execute an Agreement resulting from the award of this solicitation. This process typically takes approximately three weeks from the date the successful Contractor is identified. In order to keep the procurement moving forward, a sample standard Agreement is attached for review as part of this solicitation (Document C, Exhibit I). Exceptions, if any, to the County's standard Agreement must be noted in the bid to be considered during evaluation. Exceptions to the County's standard Agreement may result in rejection of the bid.
- 21.2 Do not fill in or sign the sample Agreement attached. The County will prepare an Agreement specific to this solicitation for execution by the successful Contractor.
- 22 **AFFIDAVIT:** The attached affidavit is provided to facilitate compliance with the applicable law.
- 23 **PUBLIC INFORMATION/PROPRIETARY/CONFIDENTIAL INFORMATION:**
- 23.1 The County operates under a public information law, which permits access to most records and documents.
- 23.2 Bids will be available for public inspection after the award announcement, except to the extent that a Contractor designates trade secrets or other proprietary data to be confidential. Material designated as confidential must be readily separable from the remainder of the bid to facilitate public inspection of the non-confidential portion of the bid. A Contractor's designation of material as confidential will not necessarily be conclusive, and the Contractor may be required to provide justification why such material should not be disclosed, on request, under the Maryland Access to Public Records Act, State Government Article, Sections 10-611 through 10-628, of the Annotated Code of Maryland.
- 24 **COOPERATIVE PURCHASE:**
- 24.1 The County reserves the right to extend all of the terms, conditions, specifications, and unit or other prices of any contract resulting from this bid to any and all public bodies, subdivisions, school districts, community colleges, colleges, and universities including non-public schools. This is conditioned upon mutual agreement of all parties pursuant to special requirements, which may be appended thereto. The supplier/Contractor agrees to notify the issuing body of those entities that wish to use any contract resulting from this bid and will also provide usage information, which may be requested.

- 24.2 The County assumes no authority, liability or obligation, on behalf of any other public or non-public entity that may use any contract resulting from this bid. All purchases and payment transactions will be made directly between the Contractor and the requesting entity. Any exceptions to this requirement must be specifically noted in the bid response.
- 25 ENVIRONMENTALLY PREFERABLE PRODUCTS: The County shall give a percentage price preference not exceeding 5% for the purchase of environmentally preferable products. The percentage price preference will not apply if doing so will cause a denial of Federal or State funding or is inconsistent with Federal or State law.

DOCUMENT C

VEHICLE, TRANSPORTER FOR PLATFORM ON DEMAND

SPECIFICATIONS

- 1 SCOPE: Howard County, Maryland, (the "County"), seeks a qualified Contractor (the "Contractor"), to furnish a Vehicle, Transporter for Platform On Demand (POD) as called for in the contract documents, Specifications, and Price Page.
- 2 BID DEPOSIT:
 - 2.1 A bid deposit, in the form of a Certified Check, Cashier's Check, or Bid Bond, shall accompany this bid. The bid deposit shall be 5 % of the total amount bid and shall be in accordance with Bid Document "B", Paragraph #2.
 - 2.2 Bid deposits will be returned to the unsuccessful Contractors upon the award of the contract. And to the successful Contractor upon execution of the contract and the meeting of bond requirements.
- 3 PERFORMANCE BOND: A performance bond for the full amount of the contract shall be required of the Contractor within ten days after award notification. Said bond shall be issued by a surety company licensed to do business in Maryland.
- 4 QUESTIONS AND INQUIRIES: The Office of Purchasing is the sole point of contact for this IFB. Questions concerning this IFB must be addressed in writing to Evangeline Bolder, CPPB, Buyer, FAX number (410) 313-6388 or e-mail ebolder@howardcountymd.gov and delivered no later than June 2, 2010 at 4:00 p.m.
- 5 CONTRACTOR'S QUALIFICATIONS:
 - 5.1 Contractors must be primarily engaged in providing POD exchange transport vehicles and must have been actively engaged in this field for a period of no less than three years.
 - 5.2 The County reserves the right to inspect the Contractor's equipment and to perform such investigations as may be deemed necessary to insure that competent personnel and management will be utilized in the performance of the contract.
- 6 INSURANCE:
 - 6.1 Unless otherwise required by Special Conditions of this Invitation for Bid, if a contract is awarded, the Contractor will be required to purchase and maintain during the life of the contract, including any subsequent renewal terms, Comprehensive General Liability Insurance, Comprehensive Automobile Liability insurance, and Worker's Compensation insurance with limits of not less than those set forth below:
 - 6.1.1 Comprehensive General Liability Insurance: Combined Single Liability limits of \$1,000,000 each occurrence and \$1,000,000 aggregate naming Howard County, Maryland as an Additional Insured.
 - 6.1.2 Comprehensive Automobile Liability Insurance: Combined Single Liability limit of \$1,000,000 any one accident.

- 6.1.3 Worker's Compensation Insurance: Statutory coverage for Maryland jurisdiction, including Employer's Liability coverage, with a limit of at least \$100,000.
- 6.2 The Contractor shall assure that all subcontractors performing services in accordance with this solicitation carry identical insurance coverage as required of the Contractor, either individually or as an Additional Insured on the policies of the Contractor. Exceptions may be made only with the approval of the County. The Contractor shall indemnify the County for any uninsured losses relating to contractual services involving subcontractors, including workers' compensation claims.
- 6.3 The Contractor shall provide the County with Certificates of Insurance within ten days of bid award notification, evidencing the coverages required above. Such certificates shall provide that the County be given at least 30 days prior written notice of any cancellation of, intention to not renew, or material change in such coverage. The Contractor must provide Certificates of Insurance before commencing work in connection with the contract. Howard County, Maryland must be shown as an Additional Insured on the certificate.
- 6.4 The providing of any insurance required herein does not relieve the Contractor of any of the responsibilities or obligations assumed by the Contractor in the contract awarded or for which the Contractor may be liable by law or otherwise.
- 6.5 Failure to provide and continue to enforce such insurance as required above shall be deemed a material breach of the contract and shall operate as an immediate termination thereof.
- 7 SUBMISSION OF BID DOCUMENTS – HARD COPY AND CD REQUIRED:
- 7.1 This Invitation For Bids requires the return of Bid Document “D”, (Price Pages), Bid Document “E” (Environmentally Preferable Products), Bid Document “F” (Affidavit), Bid Document “G” (Equal Business Opportunity Participation), and any exceptions the Contractor may take (on company letterhead). Failure to return required documents may be cause for rejection of the bid.
- 7.2 The required bid documents shall be submitted, in duplicate (original and one copy), to the Howard County Office of Purchasing, Gateway Building, 6751 Columbia Gateway Drive, Suite 501, Columbia, Maryland 21046 no later than the opening date and time specified on the cover page.
- 7.3 Contractors must submit a CD containing the entire, identical hard copy of the bid along with the hard copies required above.
- 8 METHOD OF AWARD: The County intends to award the lowest responsive and responsible Contractor meeting the specifications for the Total Bid Price, Price Page, Bid Document “D”.
- 9 BILLING AND PAYMENT:
- 9.1 The Contractor shall submit invoices in triplicate to Department of Fire and Rescue, 6751 Columbia Gateway Drive, 4th Floor, Columbia, Maryland 21046. Invoices in the proper form and approved by the County shall be paid by the County within 30 days of receipt thereof.

- 9.2 Each invoice shall include the following information:
 - 9.2.1 Contractor's name;
 - 9.2.2 Address;
 - 9.2.3 Federal tax identification number;
 - 9.2.4 Purchase Order number (the first digit is 2XXXXXXXXXX);
 - 9.2.5 Unit price and extended;
 - 9.2.6 Description of goods provided;
 - 9.2.7 The proper form of County invoices requires that the information enumerated above be included on all invoices. In order to facilitate prompt payment, invoices must contain the prescribed information in order to be successfully entered into the County's financial system.
 - 9.2.8 Invoices failing to contain the information enumerated above may be returned for correction. The County reserves the right to approve such invoices, in its sole discretion, and to request such detail and additional information as the County, in its discretion deems appropriate.
 - 9.2.9 Provide a sample invoice with the bid response.
- 9.3 The County reserves the right to make payments via electronic funds transfer (a.k.a. ACH) on contracts for which this payment vehicle is appropriate.
- 9.4 Delivery tickets signed by authorized County personnel shall accompany invoice.
- 9.5 Payment shall be made after delivery and upon receipt of proper invoice from Contractor and authorized by the head of the department or their designee.
- 9.6 All amounts, costs, or prices referred to herein pursuant to this contract shall be United States of America currency.
- 10 EXCEPTIONS: The Contractor shall furnish a statement on company letterhead giving a complete description of all exceptions to the terms, conditions, and specifications. Failure to furnish the statement will mean that the Contractor agrees to meet all requirements of the terms, conditions, and specifications.
- 11 LITERATURE: Two sets of complete descriptive literature must be furnished with bid. Failure to do so shall be sufficient cause for rejection of the bid. Use of recycled paper is encouraged.
- 12 WARRANTY:
 - 12.1 The Contractor warrants the Exchange POD Transport Vehicle furnished, to be of the highest quality, complying with the specifications and free from all defects whatsoever in workmanship and materials, for a period of one year from the date of delivery. Replacements and repairs under this warranty are to be made by the Contractor at no cost to the satisfaction of the County.

- 12.2 The material supplied by the Contractor shall carry the manufacturer's standard new material warranty. A labor and material warranty shall be submitted in writing with the bid.
- 13 **PACKAGING:** When practical, all Contractors must package and ship all products purchased by the County in packaging and containers made of recyclable or biodegradable materials. Contractors are encouraged to eliminate packaging or use the minimum amount necessary for product protection, in order to minimize waste to the greatest extent practicable.
- 14 **SPECIFICATIONS:**

DELIVERY

The vehicle will be delivered under its own power to insure proper break-in of all components while the vehicle is still under warranty. The vehicle will be tested to accept existing department owned POD's.

INFORMATION

At time of delivery, complete operation and maintenance manuals covering the vehicle will be provided. A permanent plate will be mounted in the driver's compartment specifying the quantity and type of fluids required including engine oil, engine coolant, transmission, pump transmission lubrication, pump primer and drive axle.

SAFETY VIDEO

At the time of delivery the manufacturer will provide one vehicle safety video, in DVD format. This video will address key safety considerations for personnel to follow when they are driving, operating, and maintaining the vehicle, including the following: vehicle pre-trip inspections, chassis operation, pump operation and safety during maintenance.

PERFORMANCE TESTS

A road test will be conducted after delivery with the vehicle fully loaded with a department owned POD and a continuous run of no less than ten (10) miles. During that time the vehicle will show no loss of power nor will it overheat. The transmission drive shaft or shafts and the axles will run quietly and be free of abnormal vibration or noise. The vehicle will meet NFPA 1901 acceleration requirements and NFPA 1901 braking requirements. The vehicle when fully loaded will not have less than 25% or more than 50% on the front axle and not less than 50% or more than 75% on the rear axle.

If the unit fails to meet the demands of the performance test, the Contractor shall make the necessary corrections to the unit at the no cost to Howard County. Payment will not be issued until unit is in full compliance.

COMMERCIAL GENERAL LIABILITY INSURANCE

Certification of insurance coverage will be enclosed.

ISO COMPLIANCE

The Manufacture shall meet the requirements of ISO 9001. These standards sponsored by the "International Organization for Standardization (ISO)" specify the quality systems that are established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance shall be included with the bid.

NFPA 2004 STANDARDS

This unit will comply with the NFPA standards effective January of 2004. Certification of slip resistance of all stepping, standing, and walking surfaces will be supplied with delivery of the vehicle. A plate that is highly visible to the driver while seated will be provided. This plate will show the overall height, length, and gross vehicle weight rating. The Manufacturing shall have programs in place for training, proficiency testing and performance for any staff involved with certifications. The Manufacturer will designate, in writing, who is qualified to witness and certify test results.

NFPA COMPLIANCY

Vehicle proposed by the bidder will meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in current edition at time of contract execution. Any specifications that differ from NFPA specifications will be indicated in the bid as "non-NFPA".

TOTAL VEHICLE ASSESSMENT CERTIFICATION

The vehicle will be third-party, independent, audit-certified to the current edition of NFPA 1901 standards. The certification includes: all design, production, operational, and performance testing of the vehicle.

APPROVAL DRAWING

A drawing of the proposed vehicle will be prepared and provided to the purchaser for approval before construction begins. The sales representative will also be provided with a copy of the same drawing. The finalized and approved drawing will become part of the contract documents. This drawing will indicate the chassis make and model, location of the lights, siren, horns, compartments, major components, etc. A "revised" approval drawing of the vehicle will be prepared and submitted by the manufacturer to the purchaser showing any changes made to the approval drawing.

WARRANTY

Limited Warranty

Except as provided below, and provided the vehicle will have been placed in service within 60 days after delivery to the original purchaser as established by our original invoice, for a period of **12 months** after delivery to the original purchaser, The manufacturer warrants to the user that its Fire and Rescue Vehicle/Apparatus is free of defects in material and workmanship. A copy of the warranty shall be included with the bid.

CHASSIS

The custom chassis shall be developed exclusively for the fire service. Chassis provided will be a new, tilt-type custom fire vehicle. The chassis will be designed and manufactured for heavy-duty service, with adequate strength, capacity for the intended load to be sustained, and the type of service required. The chassis will be the manufacturer's heavy-duty line tilt cab.

SEATING CAPACITY

The seating capacity in the cab will be two (2).

WHEELBASE

The wheelbase of the vehicle will be 216.00 inches.

REAR OVERHANG

The chassis rear overhang shall be 92.00 inches.

GVW RATING

The gross vehicle weight rating will be 70,800 lbs.

FRAME

The chassis frame will be painted the job color (RED) and will be built with two (2) steel channels bolted to five (5) cross members or more, depending on other options of the vehicle. The side rails will be a minimum of 10.25" tall web over the front and mid sections of the chassis, with a continuous smooth taper minimum of 10.75" over the rear axle. Each rail will have a section modulus of at least 25.992 cubic inches and a resisting bending moment (rbm) of at least 3,119,040 inch-pounds over the critical regions of the frame assembly, with a section modulus of at least 18.96 cubic inches with a minimum rbm of 2,275,200 inch-pounds over the rear axle. The frame rails will be constructed of at least 120,000 psi yield

strength heat-treated .38" thick steel, with 3.50" wide flanges.

FRAME REINFORCEMENT

In addition, a mainframe inverted "L" liner will be provided. It will be heat-treated steel measuring at least 12.00" x 3.00" x .25". Each liner will have a section modulus of at least 7.795 cu. in., yield strength of 110,000 psi, and rbm of 857,462 inch-pounds. Total rbm at wheelbase center will be 3,976,502 pounds per rail. The frame liner will be mounted inside of the chassis frame rail and extend the full length of the frame.

FRAME RAIL WARRANTY

Limited Warranty

Except as provided below, and provided the vehicle will have been placed in service within 60 days after delivery to the original purchaser as established by our original invoice, for a period of **50 years**, which is the estimated useful life of the vehicle, after delivery to the original purchaser, The Manufacture will warrant to the user that its chassis frame rail manufactured free of defects in design, material, or workmanship. A copy of the warranty shall be included with the bid.

FRONT NON DRIVE AXLE

The front axle will be a reverse "I" beam type with inclined king pin. It will be a Meritor axle, Model FL-943 with a rated capacity of 21,500 pounds. The turning angle will be 39 degrees to the right and 45 degrees to the left. A viewing window will be provided on each side of the axle for checking the oil level.

OIL SEALS

Oil seals with viewing window will be provided on the front axle.

SHOCK ABSORBERS

Heavy-duty telescoping shock absorbers (KONI) will be provided on the front suspension.

REAR AXLE

The rear axle will be a Meritor™, Model RT-50-160, tandem axle assembly with a minimum capacity of 40,00 to 52,000 pounds. An inter-axle differential, which divides torque evenly between axles, will be provided with an indicator light mounted on the cab instrument panel.

TOP SPEED OF VEHICLE

A rear axle ratio shall be furnished to allow the vehicle to reach an approximate top speed of 70 MPH.

OIL SEALS

Oil seals will be provided on the rear axle.

DRIVER CONTROL DIFFERENTIAL LOCK (DCDL)

A rear tandem axle will be equipped with a driver controlled differential lock (DCDL). The control will be located within easy reach of the driver.

FRONT SUSPENSION

Front spring pins will be a heavy duty taper leaf design, 54.00" long by 4.00" wide with a ground rating of 21,500 pounds. Kaiser spring pins will be provided, with double "figure-eight" grease grooves and a layer of electroless nickel plating, 1.0 mil thick around the entire pin. The bushing that holds the spring pin in place will also have a grease groove

OPTION ONE– Front suspension will be provided with a minimum ground rating of 22,800 pounds.

The independent suspension system will be designed to provide maximum ride comfort. The design will allow the vehicle to travel at highway speeds over improved road surfaces and at moderate speeds over rough terrain with minimal transfer of road shock and vibration to the vehicle's crew compartment. Each

wheel will have torsion bar type spring. In addition, each front wheel end will also have energy absorbing jounce bumpers to prevent bottoming of the suspension. The suspension design will be such that there are at least 10.00" of total wheel travel and a minimum of 3.75" before suspension bottoms. The torsion bar anchor lock system allows for simple lean adjustments, without the use of shims. One can adjust for a lean within 15 minutes per side. Anchor adjustment design is such that it allows for ride height adjustment on each side. The independent suspension was put through a durability test that simulated 140,000 miles of inner city driving.

REAR SUSPENSION

The rear suspension will be a Hendrickson RT-523 steel spring system with an equalizing beam design that distributes the load equally between the two (2) axles. Ground rating of the suspension will be 52,000 pounds.

ELECTRONIC STABILITY CONTROL

A vehicle control system will be provided as an integral part of the ABS brake system from Meritor Wabco. The system will monitor and update the lateral acceleration of the vehicle and compare it to a critical threshold where a side roll event may occur. If the critical threshold is met, the vehicle control system will automatically reduce engine RPM, engage the engine retarder (if equipped), and selectively apply brakes to the individual wheel ends of the front and rear axles to reduce the possibility of a side roll event. The system will monitor directional stability through a lateral accelerometer, steer angle sensor and yaw rate sensor. If spinout or drift out is detected, the vehicle control system will selectively apply brakes to the individual wheel ends of the front and rear axles to bring the vehicle back to its intended direction.

ANTI-LOCK BRAKE SYSTEM

The vehicle will be equipped with a Wabco 6S6M, anti-lock braking system. The ABS will provide a six (6) channel anti-lock braking control on both the front and rear wheels. A digitally controlled system that utilizes microprocessor technology will control the anti-lock braking system. Each wheel will be monitored by the system. When any wheel begins to lockup, a signal will be sent to the control unit. This control unit will then reduce the braking of that wheel for a fraction of a second and then reapply the brake. This anti-lock brake system will eliminate the lockup of any wheel thus helping to prevent the vehicle from skidding out of control.

AUTOMATIC TRACTION CONTROL

An anti-slip feature will be included with the ABS. The Automatic Traction Control will be used for traction in poor road and weather conditions. The Automatic Traction Control will act as an electronic differential lock that will not allow a driving wheel to spin, thereby supplying traction at all times. The ABS electronic control unit (ECU) will work with the engine ECU, sharing information concerning wheel slip. Engine ECU will use information to control engine speed, allowing only as much throttle application as required for the available traction, regardless of how much the driver is asking for. A "mud/snow" switch will be provided on the instrument panel. Activation of the switch will allow additional tire slip to let the truck climb out and get on top of deep snow or mud.

ELECTRONIC STABILITY CONTROL SYSTEM, ANTI-LOCK BRAKE SYSTEM & AUTOMATIC TRACTION CONTROL WARRANTY

The Wabco ABS/ATC system will come with a **three (3) year or 300,000 mile parts and labor** warranty provided by Meritor Wabco Vehicle Control Systems.

BRAKES

The service brake system will be full air type. The front brakes will be Knorr/Bendix disc type with a 17.00" ventilated rotor for improved stopping distance. The brake system will be certified, third party inspected, for improved stopping distance. The rear brakes will be Meritor™ 16.50" x 7.00" cam operated with automatic slack adjusters.

ENGINE BRAKE

A Jacobs Engine Brake is to be installed with the controls located on the instrument panel within easy reach of the driver. The driver will be able to turn the engine brake system on/off and have a high and low setting. The engine brake will be installed in such a manner that when the engine brake is slowing the vehicle the brake lights are activated. The ABS system will automatically disengage the auxiliary braking device, when required.

AIR COMPRESSOR, BRAKE SYSTEM

The air compressor will be a Cummins/Wabco with 18.7 cubic feet per minute output.

BRAKE SYSTEM

The brake system will include:

- Bendix Westinghouse dual brake treadle valve with vinyl covered foot surface
- Heated automatic moisture ejector on air dryer
- Total air system capacity of 6,653 cubic inches
- Two (2) air pressure gauges with a red warning light and an audible alarm, that activates when air pressure falls below 60 psi
- MGM spring set parking brake system
- Parking brake operated by a Bendix-Westinghouse PP-1 control valve
- A parking "brake on" indicator light on instrument panel
- Bendix-Westinghouse SR-1 valve, in conjunction with a double check valve system, will be provided with an automatic spring brake application at 40 psi
- Wabco System Saver 1200 air dryer

BRAKE LINES

Color-coded nylon brake lines will be provided. The lines will be wrapped in a heat protective loom in the chassis areas that are subject to excessive heat.

AIR INLET

One (1) air inlet with male coupling will be provided. It will allow station air to be supplied to the vehicle brake system through a shoreline hose. The inlet will be located on the driver side of bumper extension. A check valve will be provided to prevent reverse flow of air. The inlet will discharge into the "wet" tank of the brake system. A mating female coupling will also be provided with the loose equipment.

GLAD-HANDS

There will be two (2) Glad-Hands provided at the front bumper. The Glad-Hands will be plumbed into the brake system, allowing the tow vehicle to apply the service brakes and release the parking brakes of the disabled unit.

AUTOMATIC MOISTURE EJECTOR(S)

Five (5) automatic moisture ejectors, Bendix DV-2, will be installed in the brake system. Each moisture ejector will be equipped with a 12-volt heater, controlled by thermostat and ignition switch. The moisture ejector(s) will be provided on the all reservoirs(s).

ALL WHEEL LOCK-UP

An additional all wheel lock-up system will be installed which applies air to the front brakes only. The standard spring brake control valve system will also be used for the rear.

ENGINE

The chassis will be powered by a Cummins electronic engine as described below:

- Model: ISM-500

- Number of Cylinders: Six (6)
- Bore and Stroke: 4.92" x 5.79"
- Displacement: 661 cubic inches
- Rated Brake Horsepower: 500 at 2100 rpm
- Torque: 1550 at 1200 rpm
- Compression Ratio: 17.0:1
- Governed rpm: 2200

Standard equipment on the engine will include the following:

- Air Cleaner: Farr or Donaldson
- Fuel Filter: Single, with check valve
- Coolant Filter: Spin-on with shut off valves on the supply and return line (precharged with coolant inhibitor)
- Governor: Limiting speed type
- Injectors: Electronic unit type
- Lube Oil Cooler
- Lube Oil Filter: Combination Full Flow/Bypass
- Starting Motor: 12-volt
- Turbocharger
- Air to Air After-cooled
- Cooled Exhaust Gas Recirculation

ENGINE WARRANTY

The engine will have a **five (5) year or 100,000 mile** warranty provided by Cummins. Cummins will add a \$100.00 deductible during the extended basic coverage period in years 3, 4, and 5. There will be no deductible in the first 2 years of warranty.

ENGINE AIR INTAKE

The air intake with an ember separator will be mounted high on the passenger side of the cab, to the front of the crew cab door. The ember separator is designed to prevent road dirt and recirculating hot air from entering the engine. The ember separator will be easily accessible through a hinged stainless steel grille, with one (1) flush quarter turn latch.

EXHAUST SYSTEM

The exhaust system will be 5.00" diameter. The exhaust will exit on the right side ahead of the rear wheels. A heat deflector shield will be provided where the tail pipe is routed under any side compartmentation.

EXHAUST MODIFICATION

The exhaust pipe will be brought out from under the body at a 90 degree angle from the truck. The tail pipe will extend a minimum of 2.00" past the body, adaptable for the Plymovent system. There will be a clearance of 4.00" completely around the pipe once past the side of the body. A stop will be provided on the tail pipe that will prevent the nozzle from sliding too far on.

HIGH IDLE

A high idle switch will be provided, inside the cab, on the instrument panel, that will automatically maintain a preset engine rpm. A switch will be installed, at the cab instrument panel, for activation/deactivation. The high idle will be operational only when the parking brake is on and the truck transmission is in neutral. A green indicator light will be provided, adjacent to the switch. The light will illuminate when the above conditions are met. The light will be labeled "OK to Engage High Idle".

COOLANT LINES

Silicone hoses will be used for all engine coolant/heater lines. Hose clamps will be the stainless steel constant torque type to prevent coolant leakage. They will expand and contract according to coolant

system temperature thereby keeping a constant clamping pressure on the hose.

RADIATOR

Radiator and the complete cooling system will meet or exceed NFPA cooling system standards. Cooling system capacity will exceed all cooling requirements specified by the engine manufacturer under all truck operating conditions. It will have a built-in low coolant sight glass and an electronically controlled low coolant display mounted on the instrument panel. An integral surge and de-aeration tank will be provided to optimize the cooling system for all operating conditions. The cooling system will be designed to maintain a minimum pressure of nine (9) psi. A drain valve will be located at the lowest point of the cooling system and at other points to permit complete flushing of the coolant from the system. Cooling air will be drawn in by a heavy-duty fan, shrouded by recirculation shields that permit only fresh cool air through the radiator. Radiator will be of the serpentine design and bonded together by the patented "beta-weld" process for increased strength, longer road life and solder-bloom corrosion protection. Radiator will be mounted in a manner to prevent the development of leaks caused by twisting or straining when the vehicle operates over uneven ground. Radiator core will be compatible with commercial antifreeze solutions. Cooling system will exhibit rapid warm-up without use of radiator shutters.

FUEL TANK

A 75-gallon fuel tank will be provided and mounted at the rear of the chassis. The tank will be constructed of 12-gauge, hot rolled steel. It will be equipped with swash partitions and a vent. A .75" drain plug will be located in a low point of the tank for drainage. A fill inlet will be located on the driver's and passenger side of the body and be covered with a hinged, spring loaded, stainless steel door that is marked "Diesel Fuel Only". A .50" diameter vent will be installed from tank top to just below fuel fill inlet. The fuel tank will meet all FHWA 393.67 requirements including a fill capacity of 95% of tank volume. All fuel lines will be provided as recommended by the engine manufacturer. The tank will be coated with linex before it is installed.

FUEL COOLER

An air to fuel cooler will be installed, in the engine fuel return line.

TRANSMISSION

An Allison Gen IV, model EVS 4000P, electronic, torque converting, automatic transmission will be provided. two (2) PTO openings will be located on left side and top of converter housing (positions 8 o'clock and 1 o'clock). A transmission temperature gauge with red light and buzzer will be installed on the cab instrument panel.

TRANSMISSION SHIFTER

A six (6)-speed T-Handle shift module will be mounted to right of driver on console. Shift position indicator will be indirectly lit for after dark operation. The transmission ratio will be: 1st - 3.51 to 1.00, 2nd - 1.91 to 1.00, 3rd - 1.43 to 1.00, 4th - 1.00 to 1.00, 5th - 0.75 to 1.00, 6th - 0.64 to 1.00, R - 4.80 to 1.00.

TRANSMISSION COOLER

A transmission oil cooler will be provided in the lower tank of the radiator.

TRANSMISSION WARRANTY

The transmission will have a **five (5) year/unlimited mileage** warranty covering 100% parts and labor. The warranty will be provided by Allison Transmission.

DRIVELINE

Drivelines will be a heavy-duty metal tube and be equipped with Spicer 1810 universal joints. The shafts will be dynamically balanced before installation. A splined slip joint will be provided in each driveshaft, slip joint will be coated with Glidecoat or equivalent.

STEERING

Dual Sheppard M110 steering gears, with integral heavy-duty power steering, will be provided. The power steering will incorporate a Vickers V20F three (3)-line hydraulic pump with integral pressure and flow control.

The steering wheel will be:

- 18.00" in diameter
- Capable of tilting and telescoping
- Four (4)-spoke design

STEERING WARRANTY

The steering gear will have a three (3) year parts and labor warranty.

TIRES/WHEELS

Front tires will be Michelin 425/65R22.50 radials, 20 ply "Hiway Rib" XFE tread. The tires will be mounted on Alcoa 22.50" x 12.25" polished aluminum disc-type wheels with a ten (10) stud, 11.25" bolt circle.

Rear tires will be eight (8) Michelin 12R22.50 radials, 16 ply XDN2 all season tread. The tires will be mounted on Alcoa 22.50" x 8.25" polished aluminum disc wheels with a ten (10)-stud 11.25" bolt circle.

WHEEL CHOCKS

There will be one (1) set of folding Ziamatic SAC-44-E, aluminum alloy, Quick-Choc wheel blocks, with easy-grip handle and SQCH-44-H horizontal mounting brackets provided. The chocks will be mounted on the under driver side compartment.

WHEEL SAFETY BANDS

The following two (2) wheels, located Front Tires, will have the Tyron, Wheel Safety Bands installed. Chassis steering and handling will be improved when a tire with a band fails.

TIRE PRESSURE MANAGEMENT

There will be a tire pressure management system provided that will monitor each tires pressure and temperature. A 2" gauge located in the cab instrument panel will indicate each tires position, pressure and temperature. A wireless sensor will be mounted to each wheel for a total of 10 sensors.

The system will have three (3) alert levels:

- Critical Low Pressure Alert
- Pressure Deviation Alert
- High Temperature Alert

Each alert will trigger an audible alarm and an indicator light within the gauge to signal the driver of the problem. The system will be covered by a five (5) year parts and labor warranty. Please see warranty document for details.

COVERS, LUG NUT, CHROME

Chrome lug nut covers will be supplied on front and rear wheels.

MUD FLAPS

Mud flaps will be installed behind the front and rear wheels.

CAB

The cab will be designed specifically for the fire service and manufactured by the chassis builder. Construction of the cab will consist of 5052-H32 .125" aluminum welded to extruded aluminum framing.

The cab will be 96.00" wide, with an interior width of 87.50". The overall height (from the cab roof to the ground) will be approximately 103.00". The overall height listed will be calculated based on a truck configuration with the lowest suspension weight ratings, the smallest diameter tires for the suspension, no water weight, no loose equipment weight and no personnel weight. Larger tires, wheels and suspension will increase the overall height listed.

The cab will be a two (2) door, full tilt style. The engine will be easily accessible and capable of being removed with the cab tilted. The cab will be capable of tilting 45 degrees and 90 degrees with crane assist. The cab will have three (3)-point rubber mounting and will be tilted by a hydraulic pump connected to two (2) cab lift cylinders. The cab will then be locked down by a two (2)-point automatic locking mechanism that actuates after the cab has been lowered.

The cab access steps will be 23.25" wide, crew cab will be 21.25" wide x 8.00" minimum depth and will be the half-height style door, blistered inward at the bottom. The lower exposed step area at each door location will be trimmed with aluminum tread plate and have a grip strut insert in the bottom step. The inside cab steps will not exceed 18.00" high.

A 20.00", slip resistant, handrail will be provided adjacent to all door openings to assist entrance into the cab. A chrome handrail will be provided on the inside each front cab door, for ease of entry.

The cab doors will be 37.00" wide x 58.50" high. The cab doors will be constructed of extruded aluminum with a nominal material thickness of .125". The exterior skins will be constructed from .090" aluminum. All cab entry doors will contain a conventional roll down window. Flush mounted, chrome plated paddle type door handle will be provided on the exterior of the cab doors. All interior cab door handles will also have flush paddle handles. The cab doors will be provided with both interior (rotary knob) and exterior (keyed) locks as required by FMVSS 206. The locks will be capable of activating when the doors are open or closed. The doors will remain locked if locks are activated when the doors are opened, then closed.

The door hinge will be a stainless steel piano type with a .25" pin. There will be double automotive type rubber seals around the perimeter of the door framing and door edges to ensure a weather tight fit. Full height polished stainless steel scuffplates will be installed on the inside of all cab doors. Cab door panels will be removable without disconnecting door and window mechanisms.

Engine hood side walls will be constructed of .50" aluminum, top will be constructed of .19" aluminum and will be tapered at top to allow for more driver and passenger elbow room. The engine hood will be insulated for protection from heat and sound. The noise insulation keeps the DBA level within the limits stated in the current NFPA series 1900 pamphlet. There will be access, 15.00" wide x 11.25" high, at the rear of the engine tunnel to access the engine fluid checks.

Full circular inner fender liners, in the wheel wells, will be provided. A seal will be placed between the cab and body to keep out air, water and dirt.

A curved, safety glass windshield will be provided, with over 2,754 square inches of clear viewing area. The cab windshield will have bright trim inserts in the rubber molding holding the glass in place. All cab glass will be tinted. Economical windshield replacement glass will be readily available from local auto glass suppliers.

Two (2) sun visors, 8.75" x 31.00" long, will be provided. The sun visors will be located above the windshield with one (1) mounted on each side of the cab.

Two (2) Electric windshield wipers with washer will be provided that meet FMVSS and SAE

requirements. The washer reservoir will be able to be filled without raising the cab.

A glove box with a drop-down door will be installed in the front dash panel in front of the officer's position.

CAB FLOOR

The cab and crew cab floor areas will be covered with an acoustical floor mat consisting of a black pyramid rubber facing and closed cell foam decoupler. The top surface of the material will have a series of raised pyramid shapes evenly spaced, which offer a superior grip surface. Additionally, the material has a .25" thick closed cell foam (no water absorption) which offers a sound dampening material for reducing sound levels.

ELECTRIC WINDOW DURABILITY CERTIFICATION

Cab window roll-up systems can cause maintenance problems if not designed for long service life. The window regulator design will complete 30,000 complete up-down cycles and still function normally when finished. The bidder will certify that sample doors and windows similar to those provided on the vehicle have been tested and have met these criteria without malfunction or significant component wear.

ELECTRIC OPERATED CAB DOOR WINDOWS

The front cab doors will be equipped with electric operated windows. Each cab door will have a window control that is an automotive style, located on the inside door panel within easy reach. The driver's side door panel will also include a control switch for the passenger side electric window.

ELECTRIC CAB DOOR LOCKS

The front driver and officer doors will have a door lock master switch. The master switches will control all cab door locks. There will be one (1) concealed switch located in an easily accessible chassis specific location that will unlock all the doors. The lock system will include two (2) key FOBs that allow for keyless entry into the vehicle. The key FOB system will use code hopping technology for high security and be FCC part 15 compliant.

KNOX-BOX®

There will be one (1) Knox-Box® installed behind the driver's seat.

LOGO AND CUSTOMER DESIGNATION ON HORN BUTTON

The steering wheel will contain the customer name. The emblem will have three (3) rows of text for customer's department name. There will be a maximum of eight (8) characters in the first row, eleven (11) characters in the second row and eleven (11) characters in the third row. The first row of text will be: **Howard**; The second row of text will be: **County**; The third row of text will be: **Fire & Rescue**.

FLUID CHECK ACCESS DOOR

A painted aluminum door will be provided on the side of the cab to access the engine and transmission oil level dipsticks. The access will be for fluid level checks only; the cab will have to be raised to add fluids.

FENDER CROWNS

Stainless steel fender crowns will be installed at the cab wheel openings. The fender crowns will have a radius outside corner that will allow the fender crown to extend out further than the standard width crown, thus extending beyond the sidewall of the front tires and allow the crew cab doors to open fully.

DOOR JAM SCUFFPLATES

All cab door jambs will be furnished with a stainless steel scuffplate, mounted on the striker side of the jam.

MOLDING (on sides of cab)

Chrome molding will be provided on both sides of cab.

CAB LIFT

A hydraulic cab lift system will be provided consisting of an electric powered hydraulic pump, dual lift cylinders, and necessary hoses and valves. Lift controls will be on a panel located on the passenger side pump panel. Cab will be locked down by a two (2)-point automatic spring-loaded hook mechanism that actuates after the cab has been lowered. The hydraulic cylinders will be equipped with a velocity fuse that protects the cab from accidentally descending when the control is located in the tilt position. A redundant mechanical stay arm will automatically be engaged once the cab has been fully raised.

INTERLOCK, CAB LIFT TO PARKING BRAKE

The cab lift system will be interlocked to the parking brake. **The cab tilt mechanism will be active only when the parking brake is set and the ignition switch is in the on position, if the parking brake is released the cab tilt mechanism will be disabled.**

MIRRORS

Ramco, model #6001FFHR-750, polished aluminum 9.25" x 13.50" mirrors, with full flat glass section, will be mounted on each side of the front cab corner. The mirrors will be located 5.75" from the base edge of mirror to the cab door hinge. A convex section will be bolted to the top of each mirror. The flat glass in each mirror will be heated and adjustable with remote controls that are convenient to the driver. The convex section in each mirror will be adjusted manually. The extension arms will be 15.00" long.

FRONT CROSS VIEW MIRROR

An 8.00" diameter convex mirror will be provided over the officer's side front corner of the cab. The mirror will provide the driver with a view of the front bumper and the area several feet in front of the truck. The mirror housing, tubing, clamps, and hardware will be constructed of corrosion resistant stainless steel and consist of three support brackets to reduce vibration.

BUMPER

A one (1) piece bumper manufactured from .25" formed steel with a .38" bend radius will be provided. The bumper will be a minimum of 10.00" high with a 1.50" top and bottom flange, and will extend 22.00" from the face of the cab. The bumper will be 95.28" wide with 45 degree corners and side plates. The bumper will be metal finished and painted job color. The front of the bumper will be covered with chevron striping, 6" diamond grade red and green. To provide adequate support strength, the bumper will be mounted directly to the front of the C channel frame. The frame will be a bolted modular extension frame constructed of 50,000 psi tensile steel.

GRAVEL PAN

A gravel pan, constructed of bright aluminum tread plate, will be furnished between the bumper and the cab face. The pan will be properly supported from the underside to prevent flexing and vibration.

LIFT AND TOW MOUNTS WITH TOW EYES

Mounted to the frame extension will be lift and tow mounts. Incorporated in the mounts will be two (2) painted steel tow eyes. The lift and tow mounts will be designed and positioned to adapt to certain tow truck lift systems. The tow eyes will not be used for lifting of the vehicle. The inner and outer edges of the tow eyes will have a .25" radius. The lift and tow mounts with eyes will be painted the same color as the frame.

CAB INTERIOR

The wrap-around style high impact ABS plastic cab dash fascia will be designed to provide unobstructed visibility to instrumentation. The dash layout will provide the driver with a quick reference to gauges that

allows more time to focus on the road. The center console will include an easily removable cover for the defroster, two (2) cup holders located one (1) each side at the rear of the console, and two (2) 12 volt power sources (cigar lighter style).

The officer side dash and center console will be a flat faced design to provide easy maintenance and will be constructed out of painted aluminum.

The engine tunnel will be padded and covered with 46 ounce leather grain vinyl resistant to oil, grease and mildew. The upper door liners will be constructed of an aluminum backing covered with padded upholstery.

The headliner will be installed in both forward and rear cab sections. Headliner material will be vinyl. A sound barrier will be part of its composition. Material will be installed on aluminum sheet and securely fastened to interior cab ceiling. Forward portion of cab headliner will provide easy access for servicing electrical wiring or for other maintenance needs without removing the entire unit.

The cab and crew cab walls will be insulated with 2.00" insulation where possible and the roof with 1.00" insulation to aid in cooling. The insulation will be covered with a vinyl liner or a metal panel painted to match the interior.

CAB INTERIOR UPHOLSTERY

The cab interior upholstery will be dark silver gray.

INTERIOR PAINT (Cab)

A rich looking interior will be provided by painting all the metal surfaces inside the cab gray, vinyl texture paint.

GRAB HANDLE

A black rubber covered grab handle will be mounted on the lower portion of the driver's side cab entrance to assist in entering the cab. The grab handle will be securely mounted to the post area between the door and steering wheel column. A long rubber grab handle will be mounted on the dash board in front of the officer.

DRIVER & OFFICER SEAT

A Seats Inc. #911 "scissors-action" air-ride high-back style seat will be provided in the cab for the driver and officer. The seat will be furnished with three (3)-point shoulder type seat belt. The seat belt will be furnished with automatic retractor. Extension will be provided with the seat belt so the male end can be easily grasped and the female end easily located while sitting in a normal position. The driver's seat back will be removable for ease of access to components located behind the driver seat.

SEAT UPHOLSTERY

All Seats Inc. 911 seat upholstery will be **gray** woven with **black** Imperial 1200 material.

SHOULDER HARNESS HEIGHT ADJUSTMENT

All seating positions furnished with three (3)-point shoulder type seat belts will include a height adjustment. This adjustment will optimize the belts effectiveness and comfort for the seated firefighter.

SEAT BELTS (red)

All seating positions in cab and crew cab will have **red** seat belts.

FRONTAL IMPACT PROTECTION

The cab will be equipped with a frontal impact protection system consisting of one (1) air bag in front of the driver, one (1) knee bolster air bag in front of the forward passenger seating position,

and S4 for suspension seats or belt pretensioners for fixed seats in the driver and forward passenger positions. The air bags will be designed specifically for the cab configurations.

The cab and chassis design will have been subjected, via third party test facility, to a 21 MPH crash impact during frontal and oblique impact testing. Testing will include all major chassis and cab components such as mounting straps for fuel and air tanks, suspension mounts, front suspension components, rear suspension components, frame rail cross members, engine and transmission and their mounts, pump house and mounts, frame extensions and body mounts. The testing will provide configuration specific information used to optimize the timing for firing the air bags.

The driver side air bag will be mounted in the steering wheel and will be designed to protect the head and upper torso of the occupant, when used in combination with the 3-point seat belt, in the event of a frontal or oblique impact. The passenger side knee bolster air bag will be mounted in the modesty panel below the dash panel and will be designed to protect the legs of the occupant, when used in combination with the 3-point seat belt, in the event of a frontal or oblique impact.

In the event of a frontal or oblique impact, the system will deploy the front driver and passenger side air bags, and activate the following components integrated into the driver and front passenger cab seats:

- Suspension seats will be retracted to lowest travel position.
- Seat belts will be pretensioned to firmly hold the occupants in place.

ADVANCED SIDE ROLL PROTECTION PACKAGE

An advanced side roll protection system will be provided. The system will be a supplemental restraint system designed for use with seat belts. The system will be designed for a fast or slow vehicle 90-degree roll to the side, where the vehicle comes to rest on its side. The system will consist of the following key components:

- Side air bags will only be provided outboard of the driver and officer forward positions. The side air bag will be a tubular structure that extends diagonally across the width of the side window to help keep the occupant's head inside the vehicle and away from the window opening.
- An integral suspension seat safety system will be installed on the driver's seat. When activated, this system will remove excess slack from the seat belt and retract the seat to its lowest travel position.
- Seat belt pretensioners will be provided in the remaining seating positions. When activated, these pretensioners will remove excess slack from the seat belt.
- Side wall impact-absorbing cushions will be provided outboard of the crew cab seating positions.
- A Side Roll Sensor will be installed in the cab above the engine tunnel between the head liner and the cab roof skin. The sensor will analyze the vehicle's angle and rate of roll to activate the advanced occupant restraints 120ms before the cab reaches 60 degrees from vertical. In the event of a side roll, the sensor will activate the advanced occupant restraints. The sensor will not activate in the event of a frontal impact, side impact, or any other incidents not involving a vehicle side rollover. If more than eight protective devices are required, a slave side roll sensor will be provided with capacity for additional protective devices. The sensor(s) will perform real time diagnostics of all critical subsystems and will record sensory inputs immediately before and during a side roll event. A fault-indicating light will be provided on the vehicles instrument panel.

CAB WARRANTY

Limited Warranty

Except as provided below, and provided the vehicle will have been placed in service within 60 days after delivery to the original purchaser as established by our original invoice, for a period of **ten (10) years**

after delivery to the original purchaser **or the first 100,000 miles** of use, whichever first occurs, The Manufacture will warrant to the user that its custom fire and/or rescue vehicle cab are free of defects in design or workmanship in the cab tubular support and mounting supports and other cab structural components identified in these specifications. A copy of the warranty shall be included with the bid.

ENGINE COMPARTMENT LIGHT

An engine compartment light will be installed under the engine hood, of which the switch is an integral part. Light will have a .125" diameter hole in its lens to prevent moisture retention.

CAB DOME LIGHTS

There will be two (2) Whelen, **Red/Clear** LED 7"x3" dome lights located one over the driver side and one over the passenger side, controlled by the following:

- **Clear** forward light controlled by the door switch and a switch on the lens.
- **Red** rearward light controlled by the lens switch.
- Two (2) Adjustable Map Lights with switches mounted on the cab ceiling
- A Courtesy Light at Each Door Opening controlled by automatic door switches.

STEP LIGHTS

For reduced overall maintenance costs compared to incandescent lighting, there will be four (4) Ritar, Model M27HW2, LED, step lights provided. The lights will be installed at each cab door, one (1) per step, in the driver side and passenger side doorstep. The lights will be activated when the adjacent door is opened.

CAB DEFROSTER/HEATER

There will be a 41,000 BTU/hr defroster in the cab located under the engine tunnel. The defroster ventilation will be built into the design of the cab dash instrument panel and will be easily removable for maintenance. The defroster will have a three (3) speed blower, and temperature controls accessible to the driver and officer. The defroster ducts will be designed to provide maximum defrosting capabilities for the front cab windows. Two (2) auxiliary heaters with 32,000 BTU/hr each will be provided in the cab. The heaters will have a three (3) speed blower, and temperature controls accessible to the driver and officer. There will also be louvers located below the driver and officer positions for airflow.

AIR CONDITIONING

A high performance air conditioning system will be furnished inside the cab. The air conditioning system will perform as follows: In 100 degree Fahrenheit ambient temperature with 50 percent relative humidity and at maximum compressor speed, the cab and crew cab will cool down to 75 degrees Fahrenheit within 30 minutes. Actual test results of the air conditioning system, verifying this performance requirement, will be submitted at delivery. A 19.1 cubic inch compressor will be installed on the engine. A combination condenser/evaporator with a BTU rating sufficient to meet the performance specification will be installed on each side of the cab roof and will be painted the job color.

There will be air flow outlets located in the following locations:

- Two (2) in the ceiling, just above the driver and the officer There will also be louvers located below the driver and officer positions for airflow

The evaporator units will have an adequate BTU rating to meet the performance specifications. The air conditioning system will have adjustable air outlets incorporated into the cab ceiling at the driver, officer, and crew cab positions. The air conditioner refrigerant will be R-134A, installed by a certified technician.

LIGHT, HVAC

There will be a Whelen Super 600 LED, with **red** Super LED/clear lens light installed to the exterior of the air conditioning housing. This light will be used in place of the standard light. The light will meet

NFPA requirements.

CAB INSTRUMENTATION

The cab instrument panel will consist of gauges, an LCD display, telltale indicator lights, audible warning and control switches. The function of instrument panel controls and switches will be identified by a label adjacent to each item. Actuation of the headlight switch will illuminate the label wording for after dark operation. Telltale indicator lamps will not be illuminated unless necessary. The cab instruments and controls will be conveniently located within the forward cab section directly forward of the driver. Gauges and emergency vehicle switches will be installed on removable panels for ease of service and low cost of ownership.

The gauge panel will include the following nine (9) ivory faced gauges with chrome bezels to monitor vehicle performance:

- Voltmeter gauge (Volts)
- Tachometer (RPM)
- Speedometer (Primary (outside) MPH, Secondary (inside) Km/H)
- Fuel level gauge (Empty - Full in fractions)
- Engine oil pressure gauge (PSI)
- Front air pressure gauge (PSI)
- Rear air pressure gauge (PSI)
- Transmission oil temperature gauge (Fahrenheit)
- Engine coolant temperature gauge (Fahrenheit)

All gauges will perform prove out at initial power-up to ensure proper performance.

INDICATOR LAMPS

To promote safety, the following telltale indicator lamps will be located on the instrument panel in clear view of the driver. The indicator lamps will be "dead-front" design that is only visible when active. The colored indicator lights will have descriptive text or symbols.

The following **amber** telltale lamps will be present:

- Low coolant
- Trac cntl (traction control) (where applicable)
- Check engine
- Check trans (check transmission)
- Aux brake overheat (Auxiliary brake overheat)
- Air rest (air restriction)
- Caution (triangle symbol)
- Water in fuel
- DPF (engine diesel particulate filter regeneration)
- ABS (antilock brake system)
- MIL (engine emissions system malfunction indicator lamp) (where applicable)
- Side roll fault (where applicable)

The following **red** telltale lamps will be present:

- Warning (stop sign symbol)
- Seat belt
- Parking brake
- Stop engine
- Rack down

The following **green** telltale lamps will be provided:

- Left turn
- Right turn
- Battery on

The following **blue** telltale lamp will be provided:

- High beam

Indicator lamps will perform prove out at initial power-up to ensure proper performance.

CONTROL SWITCHES

For ease of use, the following controls will be provided immediately adjacent to the cab instrument panel within easy reach of the driver.

- Ignition switch: For ease of use in low light conditions, the switch will contain a **red** indicator light which will activate when the battery switch is on and a **green** indicator light which will activate whenever the ignition switch is on.
- Momentary engine start switch: For ease of use in low light conditions, an integral **red** indicator light will activate with the battery switch.
- Headlight / Parking light switch: A three (3)-position switch will be provided. The first switch position will deactivate all parking lights and the headlights. The second switch position will activate the parking lights. The third switch position will activate the headlights.
- Turn signal arm:
 - Self canceling turn signal
 - Wiper controls:
 - Wash function
 - Hi/Low/Intermittent
- Hazard switch will be incorporated into the steering column.
- Parking brake control
- Chassis horn control will be provided in the center of the steering wheel
- Audible steady tone warning alarm
- Audible pulsing tone caution alarm: Any active audible alarms will be silenced by holding the ignition switch at the top position for 3-5 seconds. For improved safety, silenced audible alarms will intermittently chirp every 30 seconds until the alarm conditions no longer exist. The intermittent chirp will act as a reminder to the operator that a caution or warning condition still exists. For added convenience, any new warning or caution conditions will enable again the steady or pulsing tones respectively.
- Heater and defroster controls will be located immediately adjacent to the driver at the rear of the center console.
- High Air Restriction Warning Indicator Light: LCD message with **amber** warning indicator and audible alarm.

DIAGNOSTIC PANEL

A diagnostic panel will be accessible while standing on the ground and located inside the driver's side door left of the steering column. The diagnostic panel will allow diagnostic tools such as computers to connect to various vehicle systems for improved troubleshooting providing a lower cost of ownership. Diagnostic switches will allow engine and ABS systems to provide blink codes should a problem exist. The diagnostic panel will include the following:

- Engine diagnostic port
- Transmission and ABS diagnostic port
- Roll sensor diagnostic port
- Command Zone USB diagnostic port
- Engine diagnostic switch (blink codes)
- ABS diagnostic switch (blink codes)

CAB LCD DISPLAY

An integral digital 4 row by 20 character dot matrix display will be incorporated into the gauge panel. The display will be capable of showing simple graphical images as well as text. The display will be split into 3 sections. For ease of use each quadrant will have a dedicated function. Section one (1) will provide informational messages such as the odometer. Section two (2) will display user friendly caution and warning text messages. The text messages will automatically activate anytime an audible caution or

warning tone exists to provide information to the operator of the caution or warning condition. The LCD will be capable of displaying multiple text messages should more than one caution or warning condition exist. Section three (3) will indicate additional information such as outside temperature.

SWITCHES

The design of cab instrumentation will allow for emergency lighting and other switches to be placed within easy reach of the operator thus improving safety. There will be positions for up to three (3) switch panels in the overhead console on the driver's side, up to four (4) switch panels in the engine tunnel console facing the driver, up to three (3) switch panels in the overhead console on the officer's side and up to two (2) switch panels in the engine tunnel console facing the rear.

WIPER CONTROL

For simple operation and easy reach, the windshield wiper control will be an integral part of the directional light lever located on the steering column. The wiper control will include high and low wiper speed settings, a one (1) speed intermittent wiper control with six (6) second interval and windshield washer switch. The control will have a "return to park" provision, which allows the wipers to re-turn to the stored position when the wipers are not in use.

RADIO WITH CD PLAYER

A AM/FM/Weatherband stereo radio with compact disc player will be installed. The compact disc stereo radio will be mounted within reach of the officer. The quantity and location of the speakers will be one (1) pair of 5.25" speakers located in the cab. The type and location of the antenna will be a roof-mounted rubber antenna located in an open space, on the cab roof. This radio will be installed with wireless remote control. A remote control will be provided.

RADIO ANTENNA MOUNT

An antenna-mounting base, Model MATM, with 17 feet of coax cable and weatherproof cap will be provided for a two-way radio. The mount will be located on the cab roof just to the rear of the officer seat. The cable will be routed to the seat box on the officer side with enough cable for customer to route to the instrument panel if needed.

SWITCH PANELS

The built-in emergency light switch panel will have a master switch plus individual switches for selective control. The switch panel will be located in the "overhead" position above the windshield on the driver's side to allow for easy access. Switches will be membrane type with an indicator light, of which is an integral part of the switch.

ELECTRICAL POWER CONTROL SYSTEM

The primary power distribution will be located forward of the officer's seating position and be easily accessible while standing on the ground for simplified maintenance and troubleshooting. Additional electrical distribution centers will be provided throughout the vehicle to house the vehicle's electrical power, circuit protection, and control components. The electrical distribution centers will be located strategically throughout the vehicle to minimize wire length. For ease of maintenance, all electrical distribution centers will be easily accessible. All distribution centers containing fuses, circuit breakers and/or relays will be easily accessible. Distribution centers located throughout the vehicle will contain battery powered studs for supplying customer installed equipment thus providing a lower cost of ownership. Circuit protection devices, which conform to SAE standards, will be utilized to protect electrical circuits. All circuit protection devices will be rated per NFPA requirements to prevent wire and component damage when subjected to extreme current overload. General protection circuit breakers will be Type-I automatic reset (continuously resetting). When required, automotive type fuses will be utilized to protect electronic equipment. Control relays and solenoid will have a direct current rating of 125% of the maximum current for which the circuit is protected per NFPA.

ZONE CONTROLLER SYSTEM

A solid-state electronics based control system will be utilized to achieve advanced operation and control of the vehicle components. A fully computerized vehicle network will consist of electronic modules located near their point of use to reduce harness lengths and improve reliability. The control system will comply with SAE J1939-11 recommended practices. The control system will operate as a master-slave system whereas the main control module instructs all other system components. The system will contain patented Mission Critical software that maintains critical vehicle operations in the unlikely event of a main controller error. The system will utilize a Real Time Operating System (RTOS) fully compliant with OSEK/VDX™ specifications providing a lower cost of ownership.

For increased reliability and simplified use the control system modules will include the following attributes:

- **Green** LED indicator light for module power
- **Red** LED indicator light for network communication stability status
- Control system self test at activation and continually throughout vehicle operation
- No moving parts due to transistor logic
- Software logic control for NFPA mandated safety interlocks and indicators
- Integrated electrical system load management without additional components
- Integrated electrical load sequencing system without additional components
- Customized control software to this vehicle's configuration
- Factory and field reprogrammable to accommodate changes to the vehicles operating parameters
- Complete operating and troubleshooting manuals
- USB connection to the main control module for advanced troubleshooting

To assure long life and operation in a broad range of environmental conditions, the Command Zone control system modules will meet the following specifications:

- Module circuit board will meet SAE J771 specifications.
- Operating temperature from -40C to +70C
- Storage temperature from -40C to +70C
- Vibration to 50g
- IP67 rated enclosure (Totally protected against dust and also protected against the effect of temporary immersion between 15 centimeters and 1 meter)
- Operating voltage from 8 volts to 16 volts DC

The main controller will activate status indicators and audible alarms designed to provide warning of problems before they become critical.

CIRCUIT PROTECTION AND CONTROL DIAGRAM

Copies of all job-specific, computer network input and output (I/O) connection will be provided with each chassis. The Sheets will indicate the function of each module connection point, circuit protection information (where applicable), wire numbers, wire colors and load management information.

ON-BOARD ADVANCED/VISUAL ELECTRICAL SYSTEM DIAGNOSTICS

The on-board information center will include the following diagnostic information:

- Text description of active warning or caution alarms
- Simplified warning indicators
 - **Amber** caution light with intermittent alarm
 - **Red** warning light with steady tone alarm

All control system modules, with the exception of the main control module, will contain on-board visual diagnostic LEDs that assist in troubleshooting. The LEDs will be enclosed within the sealed, transparent module housing near the face of the module. One LED for each input or output will be provided and will illuminate whenever the respective input or output is active. Color coded labels within the modules will

encompass the LEDs for ease of identification. The LED indicator lights will provide point of use information for reduced troubleshooting time without the need for an additional computer.

ADVANCED DIAGNOSTICS

An advanced, Windows-based, diagnostic software program will be provided for this control system. The software will provide troubleshooting tools to service technicians equipped with an IBM compatible computer. The service and maintenance software will be easy to understand and use, have the ability to view system input/output (I/O) information, and include a USB cable for connection from a computer to the vehicle.

INDICATOR LIGHT AND ALARM PROVE-OUT SYSTEM

A system will be provided which automatically tests basic indicator lights and alarms located on the cab instrument panel.

VOLTAGE MONITOR SYSTEM

A voltage monitoring system will be provided to indicate the status of the battery system connected to the vehicle's electrical load. The system will provide visual and audible warning when the system voltage is below or above optimum levels. The alarm will activate if the system falls below 11.8 volts DC for more than two (2) minutes.

DEDICATED RADIO EQUIPMENT CONNECTION POINTS

There will be three (3) studs provided in the primary power distribution center located in front of the officer for two-way radio equipment.

The studs will consist of the following:

- 12-volt 40-amp battery switched power
- 12-volt 60-amp ignition switched power
- 12-volt 60-amp direct battery power

There will also be a 12-volt 100-amp ground stud located in or adjacent to the power distribution center.

ENHANCED SOFTWARE

The Zone controller system will include the following software enhancements:

- All perimeter lights and scene lights (where applicable) will be deactivated when the parking brake is released
- Cab and crew cab dome lights will remain on for 10 seconds for improved visibility after the doors close. The dome lights will dim after 10 seconds or immediately if the vehicle is put into gear.
- Cab and crew cab perimeter lights will remain on for 10 seconds for improved visibility after the doors close. The dome lights will dim after 10 seconds or immediately if the vehicle is put into gear.

EMI/RFI PROTECTION

To prevent erroneous signals from crosstalk contamination and interference, the electrical system will meet, at a minimum, SAE J551/2, thus reducing undesired electromagnetic and radio frequency emissions. An advanced electrical system will be used to insure radiated and conducted electromagnetic interference (EMI) or radio frequency interference (RFI) emissions are suppressed at their source.

The vehicle will have the ability to operate in the electromagnetic environment typically found in fire ground operations to ensure clean operations. The electrical system will meet, without exceptions, electromagnetic susceptibility conforming to SAE J1113/25 Region 1, Class C EMR for 10KHz-1GHz to 100 Volts/Meter. The vehicle OEM, upon request, will provide EMC testing reports from testing conducted on an entire vehicle and will certify that the vehicle meets SAE J551/2 and SAE J1113/25 Region 1, Class C EMR for 10KHz-1GHz to 100 Volts/Meter requirements. Component and partial (incomplete) vehicle testing is not adequate as overall vehicle design can impact test results and thus is not acceptable by itself. EMI/RFI susceptibility will be controlled by applying appropriate circuit designs and shielding. The electrical system will be designed for full compatibility with low-level control signals and high-powered two-way radio communication systems. Harness and cable routing will be given

careful attention to minimize the potential for conducting and radiated EMI/RFI susceptibility.

INFORMATION CENTER

An information center employing a 7" diagonal color LCD display will be encased in an ABS plastic housing.

The information center will have the following specifications:

- Operate in temperatures from -40 to 185 degrees F
- An Optical Gel will be placed between the LCD and protective lens
- Five weather resistant user interface switches
- Black enclosure with gray decal
- Sunlight Readable
- Linux operating system
- Minimum of 400nits rated display

OPERATION

The information center will be designed for easy operation for everyday use. The page button will cycle from one screen to the next screen in a rotating fashion. A video button will allow a NTSC signal into the information center to be displayed on the LCD. Pressing any button while viewing a video feed will return the information center to the vehicle information screens. A menu button will provide access to maintenance, setup and diagnostic screens. All other button labels will be specific to the information being viewed.

GENERAL SCREEN DESIGN

Where possible, background colors will be used to provide "At a Glance" vehicle information. If information provided on a screen is within acceptable limits, a **green** background will be used. If a caution or warning situation arises the following will occur:

- An **amber** background/text color will indicate a caution condition.
- A **red** background/text color will indicate a warning condition.

Every screen will include the following:

- Exterior Ambient Temperature
- Time (12 or 24 hour mode)
- Text Alert Center:
- The information center will utilize an "Alert Center" to display text messages for audible alarm tones. The text messages will be written to identify the item(s) causing the audible alarm to sound. If more than one (1) text message occurs, the messages will cycle every second until the problem(s) have been resolved. The background color for the "Alert Center" will change to indicate the severity of the "warning" message. If a warning and a caution condition occur simultaneously, the **red** background color will be shown for all alert center messages.
- Button Labels: A label for each button will exist. The label will indicate the function for each active button for each screen. Buttons that are not utilized on specific screens will have a button label with no text.

PAGE SCREENS

The Information center will include the following screens:

Load Manager Screen: A list of items to be load managed will be provided. The list will provide:

- Description of the load
- Individual load shed priority: The lower the priority number the earlier the device will be shed should a low voltage condition occur.
- Load Status: The screen will indicate if a load has been shed (disabled) or not shed.

“At a Glance” color features are utilized on this screen

Do Not Move Truck: The Do Not Move Truck screen will indicate the approximate location and type of item that is open or is not stowed for travel. The actual status of the following devices will be indicated:

- Driver Side Cab Door
- Passenger's Side Cab Door
- Driver Side Body Doors
- Passenger's Side Body Doors
- Rear Body Door(s)
- Any other device that is opened, extended, or deployed that creates a hazard or is likely to cause damage to the vehicle if the vehicle/apparatus is moved will cause an “Alert Center” message if the parking brake is disengaged.

Chassis Information: The following information will be shown:

- Engine RPM
- Fuel Level
- Battery Voltage
- Engine Coolant Temperature
- Engine Oil Pressure

“At a Glance” color features are utilized on this screen

Active Alarms List: This screen will show a list of all active text messages. The list items text will match the text messages shown in the “Alert Center”. The date and time the message occurred is displayed with each message in the list.

MENU SCREENS

The following screens will be available through the Menu button:

View System Information: A detailed list of vehicle information:

- Battery Volts
- Pump Hours
- Transmission Oil Temperature
- Pump Engaged
- Engine Coolant Level
- Engine Oil Level
 - Oil level will only be shown when the engine is not running
- Power Steering Level

Set daytime and nighttime Display Brightness:

- Brightness: Increase and decrease
- Default setting button

Configure Video Mode:

- Set Video Contrast
- Set Video Color
- Set Video Tint

Set Startup Screen:

- Choose the screen that will be active at vehicle power-up

Set Date & Time:

- 12 or 24 hour format
- Set time
- Set date

View Active Alarms:

- Shows a list of all active alarms
 - Date and time of the occurrence is shown with each alarm
- Silence alarms
 - All alarms are silenced

System Diagnostics:

- Module type and ID number
- Module version
- Module diagnostics information:
 - Input or output number
 - Circuit number connected to that input or output
 - Circuit name (item connected to the circuit)
 - Status of the input or output
 - Power and Constant Current module diagnostic information

Button functions and button labels may change with each screen.

INTERCOM SYSTEM

A Fire-Com, model 3010R, single radio, intercom system will be provided. All headsets will be wireless. Headsets and charging stations will be provided for the driver and officer positions. The driver and officer will have radio interface capability.

The following components will be supplied with this system:

- One (1) 3010R Intercom Unit
- Two (2) Combo Packs, UHW-10 Headsets plus Transmit Base Stations

RADIO INTERFACE CABLE

The body builder will supply and install the required radio interface cable before delivery of the vehicle. The radio equipment to be used by the customer will be one (1) Motorola Astro Spectra Plus.

HEADSET HANGERS

There will be two (2) headset hanger/s installed for the intercom system. The hanger/s will be installed ceiling mounted next to driver and officer position.

TWO WAY RADIO INSTALLATION

There will be one (1) customer supplied two way radio(s) sent to the manufacture to be installed by a certified Motorola technician. A Motorola Astro Spectra Plus and radio interface cables will be installed on engine tunnel center mounted on a swivel, side by side and wired into intercom system if required.

VEHICLE CHAINS

An On Spot chain system shall be installed on the drive axle. The switch to operate the drop down chains shall be located in reach of the driver.

AUTOMATIC CHASSIS LUBRICATION

A Vogel Automatic Lubrication System will be provided. The lubrication will be supplied while the vehicle ignition switch is active to allow a uniform application of grease to the locations listed. The electronic control unit that forms part of the system will activate the pump after an adjustable interval time. The unit will control and monitor pump operation and report any faults via an indicator light on the driver's dashboard of the cab. The lubrication system reservoir which requires a 15.00" wide x 14.50" high x 6.25" deep mounting area will be located in the passenger side of the pump house, below the pump engine on the vehicle.

- Control Arm Pivot Points
- Steering Miter Box
- Cab Hinge Pins
- Rear Axle Slack Adjusters
- Rear Axle Brake Cam Screws
- Rear Suspension Spring Pins
- Rear Suspension Shackle Pins
- Walking Beam Pins

BATTERY SYSTEM

Six (6) 12 volt, Exide Model 31A950X1W batteries that include the following features will be provided:

- 950 CCA, cold cranking amps
- 190 amp reserve capacity
- High cycle
- Group 31
- Rating of 5700 CCA at 0 degrees Fahrenheit
- 1140 minutes of reserve capacity
- SAE Posts

Each battery case will be a **black** polypropylene material with a vertically ribbed container for increased vibration resistance. The cover will be manifold vented with a central venting location to allow a 45 degree tilt capacity. The inside of each battery will consist of a "maintenance free" grid construction with poly wrapped separators and a flooded epoxy bottom anchoring for maximum vibration resistance.

BATTERY SYSTEM

A single starting system will be provided. An ignition switch and starter button will be located on the instrument panel.

MASTER BATTERY SWITCH

A master battery switch, to activate the battery system, will be provided inside the cab within easy reach of the driver. An indicator light will be provided on the instrument panel to notify the driver of the status of the battery system.

BATTERY COMPARTMENTS

A well ventilated battery compartment box which shall be located on the driver side of the chassis, securely bolted to the frame rails. The box shall include drain holes in the bottom for sufficient drainage of water and shall include phenolic board battery hold downs and a durable, Dry-Deck in the bottom of the tray under each battery to allow for air flow and drainage. Heavy-duty battery cables will be used to provide maximum power to the electrical system. Cables will be color-coded. Battery terminal connections will be coated with anticorrosion compound. Battery solenoid terminal connections will be encapsulated with semi-permanent rubberized com-pound.

BATTERY CHARGER/ AIR COMPRESSOR

A Kussmaul Pump Plus 1000, model 091-9-1000 single output battery charger/air compressor system with internal battery saver will be provided. A display bar graph indicating the state of charge will be included. The battery saver circuit will be capable of supplying up to three (3) amps for external loads such as hand light or auxiliary radio batteries. The 12-volt air compressor will be installed to maintain the air system pressure when the vehicle is not in use. The battery charger will be wired to the AC shoreline inlet through an AC receptacle adjacent to this battery charger. Battery charger/compressor will be in cab behind the driver in area behind seat above engine tunnel. The battery charger indicator will be located on the driver's seat riser.

WIRING, 12 VOLT WITH JUMPER CABLE

A Superior Signals Model SY6325G6 battery quick disconnect system will be provided from the battery studs to the driver's side cab step well. The quick disconnect plug will be provided to enable the customer to plug a jumper cable into this quick disconnect plug and jump the chassis battery in case of failure. The receptacle will be provided with a rubber cap on the end to protect the receptacle when it is not in use.

ALTERNATOR

A C.E. Niehoff, model C628-1, alternator will be provided. It will have a rated output current of 290 amp as measured by SAE method J56. Also it will have a custom three (3)-set point voltage regulator, manufactured by C. E. Niehoff. The alternator will be connected to the power and ground distribution system with heavy-duty cables sized to carry the full rated alternator output.

ELECTRONIC LOAD MANAGER

An electronic load management (ELM) system will be provided that monitors the vehicles 12-volt electrical system, automatically reducing the electrical load in the event of a low voltage condition, and automatically restoring the shed electrical loads when a low voltage condition expires. This ensures the integrity of the electrical system.

For improved reliability and ease of use, the load manager system will be an integral part of the vehicle's solid state control system requiring no additional components to perform load management tasks. Load management systems which require additional components will not be allowed.

The system will include the following features:

- System voltage monitoring.
 - A shed load will remain inactive for a minimum of five minutes to prevent the load from cycling on and off.
 - Sixteen available electronic load shedding levels.
 - Priority levels can be set for individual outputs.
 - High Idle will not be controlled by the load manager.
 - If enabled:
 - "Load Man Hi-Idle On" will display on the information center.
 - Hi-Idle will not activate until 30 seconds after engine start up.
 - Individual switch "on" indicator to flash when the particular load has been shed.
- The information center indicates system voltage.

The information center includes a "Load Manager" screen indicating the following:

- Load managed items list, with priority levels and item condition.
- Individual load managed item condition:
 - ON = not shed
 - SHED = shed

SEQUENCER

A sequencer will be provided that automatically activates and deactivates vehicle loads in a preset sequence thereby protecting the alternator from power surges. This sequencer operation will allow a gradual increase or decrease in alternator output, rather than loading or dumping the entire 12 volt load to prolong the life of the alternator. For improved reliability and ease of use, the load sequencing system will be an integral part of the vehicle's solid state control system requiring no additional components to perform load sequencing tasks. Load sequencing systems which require additional components will not be allowed.

Emergency light sequencing will operate in conjunction with the emergency master light switch. When the emergency master switch is activated, the emergency lights will be activated one by one at half-second intervals. Sequenced emergency light switch indicators will flash while waiting for activation.

When the emergency master switch is deactivated, the sequencer will deactivate the warning light loads in the reverse order.

Sequencing of the following items will also occur, in conjunction with the ignition switch, at half-second intervals:

- Cab Heater and Air Conditioning
- Crew Cab Heater (if applicable)
- Crew Cab Air Conditioning (if applicable)
- Exhaust Fans (if applicable)
- Third Evaporator (if applicable)

AMP DRAW REPORT

The bidder will provide, at the time of bid and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.

The manufacturer of the vehicle will provide the following:

- 1) Documentation of the electrical system performance tests.
- 2) A written load analysis, which will include the following:
 - A) The nameplate rating of the alternator.
 - B) The alternator rating under the conditions specified per: Applicable NFPA 1901 or 1906 (Current Edition).
 - C) The minimum continuous load of each component that is specified per: Applicable NFPA 1901 or 1906 (Current Edition).
 - D) Additional loads that, when added to the minimum continuous load, determine the total connected load.
 - E) Each individual intermittent load.

All of the above listed items will be provided by the bidder per the applicable NFPA 1901 or 1906 (Current Edition).

EXTERIOR LIGHTING

Exterior lighting will meet or exceed Federal Department of Transportation, Federal Motor Vehicle Safety Standards and National Fire Protection Association requirements in effect at time of bid. Front headlights will be halogen, rectangular shape, one (1) pair mounted in each front trim housing. The LED directional lights will wrap-around on the outside corners of the trim housing. The headlight and LED directional lights will be in the same assembly. Five (5) LED clearance and marker lights will be installed across the leading edge of the cab.

WARNING LIGHTS (Cab Face)

Two (2) pair of Whelen model 60*00F*R LED lights will be installed on the cab face, above the headlights, mounted in a common bezel. The **outer** LEDs will be required for NFPA and will meet or exceed the NFPA required light output for the front lower zone. The color of these LEDs will be **red** Super LED/clear lens. The **inner** LEDs will be additional lighting. The color of these lights will be two (2) clear Super LED one each side. Both sets of lights will be activated by the same switch in the cab.

BACK-UP ALARM

An ECCO, Model SA917-PM2, solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse will be provided. The device will sound at 60 pulses per minute and automatically adjust its volume to maintain a minimum five (5) dBA above surrounding environmental noise levels.

MANUAL, FIRE VEHICLE PARTS

Two (2) custom parts manuals for the complete fire vehicle will be provided in hard copy with the completed unit. One (1) compact disc (CD) will also be provided that will include all of the information

from the above manual.

The manual will contain the following:

- Job number
- Part numbers with full descriptions
- Table of contents
- Parts section sorted in functional groups reflecting a major system, component, or assembly
- Parts section sorted in Alphabetical order
- Instructions on how to locate a parts

The manual will be specifically written for the chassis and body model being purchased. It will not be a generic manual for a multitude of different chassis and bodies.

SERVICE PARTS INTERNET SITE

The service parts information included in this manual is also available on the Pierce website. The website offers additional functions and features not contained in this manual, such as digital photographs and line drawings of select items. The website also features electronic search tools to assist in locating parts quickly.

MANUALS, CHASSIS SERVICE

Two (2) chassis service manuals containing parts and service information on major components will be provided with the completed unit. One (1) compact disk (CD) will also be provided that will include all of the information from the above manual.

The manuals will contain the following sections:

- Job number
- Table of contents
- Troubleshooting
- Front Axle/Suspension
- Brakes
- Engine
- Tires
- Wheels
- Cab
- Electrical, DC
- Air Systems
- Plumbing
- Appendix

The manual will be specifically written for the chassis model being purchased. It will not be a generic manual for a multitude of different chassis and bodies.

MANUALS, CHASSIS OPERATION

Two (2) chassis operation manuals will be provided. One (1) compact disk (CD) will also be provided that will include all of the information from the above manual.

ZONE CONTROLLER WARRANTY

The Zone control modules, membrane switches, and display(s) will be warranted against defective materials or workmanship for a period of **five (5) years** from the date of delivery to the original purchaser. The warranty will also include a standard repair time for covered components. A copy of the fire vehicle manufacturer's warranty will be included with the bid.

ELECTRICAL WIRING DIAGRAMS

Two (2) electrical wiring diagrams, prepared for the model of chassis and body, will be provided.

TOW EYES

Two (2) rear painted tow eyes will be located at the rear of the vehicle and will be mounted directly to the chassis frame rails. The inner and outer edges of the tow eyes will have a radius.

COMPARTMENTATION

Body and compartments will be fabricated of .125", 5052-H32 aluminum with a tensile strength range of 31,000 to 38,000 psi. Side compartments will be an integral assembly with the rear fenders. Circular fender liners will be provided for prevention of rust pockets and ease of maintenance. Compartment flooring will be of the sweep out design with the floor higher than the compartment door lip. The compartment door opening will be framed by flanging the edges in 1.75" and bending out again .75" to form an angle. Drip protection will be provided above the doors by means of bright aluminum extrusion, formed bright aluminum tread plate or polished stainless steel. Front facing compartment walls will be covered with bright aluminum tread plate. All screws and bolts which protrude into a compartment will have acorn nuts on the ends to prevent injury.

UNDERBODY SUPPORT SYSTEM

Due to the severe loading requirements of this body and compartment support suitable for the intended load will be provided. The backbone of the support system will be the chassis frame rails which is the strongest component of the chassis and is designed for sustaining maximum loads. The support system will include .375" thick steel vertical angle supports bolted to the chassis frame rails with .625" diameter bolts. Attached to the bottom of the steel vertical angles will be horizontal angles, with gussets welded to the vertical members, which extend to the outside edge of the body. The body substructure will result in a 500 pound equipment support rating per lower compartment.

AGGRESSIVE WALKING SURFACE

All exterior surfaces designated as stepping, standing, and walking areas will comply with the required average slip resistance of the current NFPA standards.

LOUVERS

All body compartments will have a minimum of one (1) set of louvers stamped into a wall to provide the proper airflow inside the compartment and to prevent water from dripping into the compartment. These louvers will be formed into the metal and not added to the compartment as a separate plate.

TESTING OF BODY DESIGN

Body structural analysis will be fully tested. Proven engineering and test techniques such as finite element analysis, stress coating and strain gauging have been performed with special attention given to fatigue, life and structural integrity of the cab, body and substructure. Body will be tested while loaded to its greatest in-service weight.

The criteria used during the testing procedure will include:

- Raising opposite corners of the vehicle tires 9.00" to simulate the twisting a truck may experience when driving over a curb.
- Making a 90 degree turn, while driving at 20 mph to simulate aggressive driving conditions.
- Driving the vehicle at 35 mph on a "washboard" road.
- Driving the vehicle at 55 mph on a smooth road.
- Accelerating the vehicle fully, until reaching the approximate speed of 45 mph on rough pavement.

Evidence of actual testing techniques will be made available upon request.

BODY CONSTRUCTION

THE HEIGHT BETWEEN THE TOP OF THE BODY AND BOTTOM OF THE POD WILL BE 2.00" BY DESIGN.

To maximize the strength, longevity, and durability of the vehicle, the body, compartments, and integral mounting members shall be constructed as a singular body assembly. As a demonstration of the strength, the entire body shall be constructed, assembled and painted as a stand-alone structure separate from the chassis. The structure shall utilize the strength of the chassis frame rails to support the body without requiring the structure to physically sit upon the upper frame rail flange

BODY MOUNTING SYSTEM

The body and compartment module shall be mounted to the chassis To prevent stress cracks, the mounting system shall provide total torsional isolation between the chassis frame and the body module. The mounting system shall align the entire assembly longitudinally and transversely with the chassis frame rails. To allow for chassis frame flex, the body assembly with integral mounting members shall not rest directly on the upper chassis frame flange.

LEFT SIDE BODY COMPARTMENTS

COMPARTMENT LEFT FRONT - L1

There shall be one (1) compartment mounted forward with usable interior dimensions of approximately 54" wide x 36" high x 25" Deep

This compartment shall be configured to hold with the following equipment:

- 1.) Hook lift hoist systems hydraulic tank reservoir and /or control valve distribution assembly.

COMPARTMENT LEFT FORWARD MID – L2

There shall be one (1) compartment mounted mid-forward with usable interior dimensions of approximately 54" wide x 36" high x 25" Deep

This compartment shall be configured to hold with the following equipment:

- 1.) One adjustable shelf shall be installed.

COMPARTMENT OVER WHEEL WELLS L3

There shall be one (1) compartment mounted over the wheel wells with usable interior dimensions of approximately 110" wide x 6" high x 25" Deep

This compartment shall be configured to hold the following equipment:

- 1.) Broom and tool handles shall be located here.

COMPARTMENT LEFT AFT – L4

There shall be one (1) compartment mounted after the rear tandem axles with usable interior dimensions of approximately 30" wide x 32" high x 22" Deep

- 1.) One adjustable shelf shall be installed.

COMPARTMENT LEFT UPPER FORWARD

There shall be one (1) compartment mounted lateral upper forward, between the back of cab and hook lift container. This compartment space shall be used to both shroud the hook lift hoist device as a “bat wing” and contain a hopper for use of “speedy-dri” type absorbent material with access in the lower L1 compartment.

The compartment shall be accessible via removable panels on the rear and the lateral side’s exterior shall be painted to match the primary cab color.

RIGHT SIDE BODY COMPARTMENTS

COMPARTMENT RIGHT FRONT –R1

There shall be one (1) compartment mounted forward with usable interior dimensions of approximately 54” wide x 36” high x 25” Deep

This compartment shall be configured to hold with the following equipment:

- 1.) One adjustable shelf shall be installed.

COMPARTMENT RIGHT FORWARD MID – R2

There shall be one (1) compartment mounted mid-forward mid with usable interior dimensions of approximately 54” wide x 36” high x 25” Deep

This compartment shall be configured to hold with the following equipment:

- 1.) One adjustable shelf shall be installed.

COMPARTMENT OVER WHEEL WELLS R3

There shall be one (1) compartment mounted over the wheel wells with usable interior dimensions of approximately 110” wide x 6” high x 25” Deep

This compartment shall be configured to hold the following equipment:

- 1.) Broom and tool handles shall be located here.

COMPARTMENT RIGHT AFT – R4

There shall be one (1) compartment mounted rear of the tandem rear axles with usable interior dimensions of approximately 30” wide x 32” high x 22” Deep

COMPARTMENT RIGHT UPPER FORWARD

There shall be one (1) compartment mounted lateral upper forward, between the back of cab and hook lift container. This compartment space shall be used to both shroud the hook lift hoist device “bat wing” and contain a hopper for use of “speedy-dri” absorbent material with access in the lower R1 compartment.

The compartment shall be accessible via removable panels on the rear and the lateral side’s exterior shall be painted to match the primary cab color.

LEFT SIDE STEP AND COMPARTMENT DOORS

The left side L1 and L2 compartments of the vehicle shall be provided with a recessed mounted swing down compartment door and side step combination units. The door shall have a non-slip inside surface. The dimensions of the door shall be 33" high x 54" wide. The door shall have step light assemblies installed on door surface. The exterior of the compartment door shall be painted truck color.

The drop down door step will have a heavy duty hidden hinge design with no exposed springs, gas rods or mounts that can impinge upon crew safety. The step will be rated at 1000# total load on the hinge design.

RIGHT SIDE STEP AND COMPARTMENT DOORS

The right side of the vehicle R1 and R2 compartments shall be provided with a recessed mounted swing down compartment door and side step combination units. The door shall have a non-slip inside surface. The dimensions of the doors shall be 33" high x 54" wide. The doors shall have step light assemblies installed on door surface. The exterior of the compartment door shall be painted truck color.

The drop down door step will have a heavy duty hidden hinge design with no exposed springs, gas rods or mounts that can impinge upon crew safety. The step will be rated at 1000# total load on the hinge design.

REAR OF BODY RR1 COMPARTMENT

The rear of the body shall house DOT marker, tail and warning lights. A rear compartment, between the chassis frame rails shall be provided with interior dimensions of 36" wide, 12" high and 12" deep. The final dimensions of this compartment will be based upon the awarded chassis and the last frame cross brace along the rear design parameters.

A drop down door shall be provided.

CHEVRON STRIPING, REAR

There will be alternating chevron striping located on the rear-facing vertical surface of the vehicle. The entire rear surface will be covered. The colors will be **red** and **fluorescent yellow green** diamond grade. Each stripe will be 6.00" in width. This will meet the requirements of NFPA 1901, 2009 edition, which states that 50% of the rear surface will be covered with chevron striping.

UPPER BODY FINISH

The upper hook lift body shall be finished in aggressive finish surface meeting the NFPA 1901 2009 edition criteria to both provide surface protection between the container and body and act as a walking surface.

RUB RAIL

Bottom edge of the side compartments will be trimmed with a bright aluminum extruded rub rail. Trim will be 2.12" high with 1.38" flanges turned outward for rigidity. The rub rails will not be an integral part of the body construction, which allows replacement in the event of damage.

BODY FENDER CROWNS

Stainless steel fender crowns will be provided around the rear wheel openings. A rubber welting will be provided between the body and the crown to seal the seam and restrict moisture from entering.

BODY WARRANTY

Limited Warranty

Except as provided below, and provided the vehicle will have been placed in service within 60 days after delivery to the original purchaser as established by our original invoice, for a period of **ten (10) years** after delivery to the original purchaser **or the first 100,000 miles** of use, whichever first occurs, the Manufacturer warrants to the user that its heavy duty body are free of defects in design and workmanship in body tubular support, mounting structures and other structural components identified in these specifications. A copy of the warranty will be included with the bid.

HANDRAILS

The handrails will be 1.25" diameter anodized aluminum extrusion, with a ribbed design, to provide a positive gripping surface. Chrome plated end stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces. Drain holes will be provided in the bottom of all vertically mounted handrails.

LIGHT SHIELD

Illumination will be provided for controls, switches, essential instructions, gauges, and instruments necessary for the operation of the vehicle and the equipment provided on it. External illumination will be a minimum of five (5) foot-candles on the face of the device. Internal illumination will be a minimum of four (4) foot lamberts. Lights will be installed under a stainless steel shield. Stabilizer panel light will come on at the operator's panel when the hydraulic pump is shifted into gear from inside the cab. This is to afford the operator some illumination when first approaching the control panel.

ELECTRICAL HARNESSING INSTALLATION

All 12-volt wiring and harnessing installed by the vehicle manufacturer will conform to specification PM-QA W-101: Pierce manufacturing Wiring Harness Specification.

To ensure rugged dependability, all wiring harnesses installed by the vehicle manufacturer will conform to the following specifications:

- SAE J1128 - Low tension primary cable
- SAE J1292 - Automobile, truck, truck-tractor, trailer and motor coach wiring
- SAE J163 - Low tension wiring and cable terminals and splice clips
- SAE J2202 - Heavy duty wiring systems for on-highway trucks
- NFPA 1901 - Standard for automotive fire vehicle
- FMVSS 302 - Flammability of interior materials for passenger cars, multipurpose passenger vehicles, trucks and buses
- SAE J1939 - Serial communications protocol
- SAE J2030 - Heavy-duty electrical connector performance standard
- SAE J2223 - Connections for on board vehicle electrical wiring harnesses
- NEC - National Electrical Code
- SAE J561 - Electrical terminals - Eyelet and spade type
- SAE J928 - Electrical terminals - Pin and receptacle type A

Wiring will be run in loom or conduit where exposed, and have grommets or other edge protection where wires pass through metal. Wiring will be color, function and number coded. Wire colors will be integral to each wire insulator and run the entire length of each wire. Harnessing containing multiple wires and uses a single wire color for all wires will not be allowed. Function and number codes will be continuously imprinted on all wiring harness conductors at 2.00" intervals. All wiring installed between the cab and into doors will be protected by an expandable rubber boot to protect the wiring. Exterior exposed wire connectors will be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids. Electrical wiring and equipment will be installed utilizing the following guidelines:

- (1) All wire ends not placed into connectors will be sealed with a heat shrink end cap. Wires without a terminating connector or sealed end cap will not be allowed.

- (2) All holes made in the roof will be caulked with silicon (no exception). Large fender washers, liberally caulked, will be used when fastening equipment to the underside of the cab roof.
- (3) Any electrical component that is installed in an exposed area will be mounted in a manner that will not allow moisture to accumulate in it. Exposed area will be defined as any location outside of the cab or body.
- (4) For low cost of ownership, electrical components designed to be removed for maintenance will be quickly accessible. For ease of use, a coil of wire will be provided behind the appliance to allow them to be pulled away from the mounting area for inspection and service work.
- (5) Corrosion preventative compound will be applied to non-waterproof electrical connectors located outside of the cab or body. All non-waterproof connections will require this compound in the plug to prevent corrosion and for easy separation of the plug.
- (6) Any lights containing non-waterproof sockets in a weather-exposed area will have corrosion preventative compound added to the socket terminal area.
- (7) All electrical terminals in exposed areas will have DOW 1890 protective Coating applied completely over the metal portion of the terminal.
- (8) Rubber coated metal clamps will be used to support wire harnessing and battery cables routed along the chassis frame rails.
- (9) Heat shields will be used to protect harnessing in areas where high temperatures exist. Harnessing passing near the engine exhaust will be protected by a heat shield.
- (10) All braided wire harnesses will have a permanent label attached for easy identification of the harness part number and fabrication date.
- (11) All standard wiring entering or exiting the cab will be routed through sealed bulkhead connectors to protect against water intrusion into the cab.

BATTERY CABLE INSTALLATION

All 12-volt battery cables and battery cable harnessing installed by the vehicle manufacturer will conform to the following requirements:

- SAE J1127 - Battery Cable
- SAE J561 - Electrical terminals, eyelets and spade type
- SAE J562 - Nonmetallic loom
- SAE J836A - Automotive metallurgical joining
- SAE J1292 - Automotive truck, truck-tractor, trailer and motor coach wiring
- NFPA 1901 - Standard for automotive fire vehicle

Battery cables and battery cable harnessing will be installed utilizing the following guidelines:

- (1) All battery cables and battery harnesses will have a permanent label attached for easy identification of the harness part number and fabrication date.
- (2) Splices will not be allowed on battery cables or battery cable harnesses.
- (3) For ease of identification and simplified use, battery cables will be color coded. All positive battery cables will be **red** in color or wrapped in **red** loom the entire length of the cable. All negative battery cables will be black in color.
- (4) For ease of identification, all positive battery cable isolated studs throughout the cab and chassis will be **red** in color.
- (5) For increased reliability and reduced maintenance, all electrical buss bars located on the exterior of the vehicle will be coated to prevent corrosion.

ELECTRICAL COMPONENT INSTALLATION

All lighting used on the vehicle will be, at a minimum, a two (2) wire light grounded through a wired connection to the battery system. Lights using the vehicle's metal structure for grounding will not be allowed. An operational test will be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order. The results of the tests will be recorded and provided to the purchaser at time of delivery.

REAR FMVSS LIGHTING

The rear stop/tail and directional LED lighting will consist of the following:

- Two (2) Whelen model 60R00XRR **red** LED stop/tail lights.
- Two (2) Whelen model 60A00TAR **amber** LED arrow turn lights.

Each light will be installed separately at the rear with a flange.

Four (4) **red** reflectors will be provided. A Weldon, Model 23882-2600-00, license plate bracket will be mounted on the driver's side above the warning lights. A Weldon, Model 9186-23882-30, step lamp will illuminate the license plate. Two (2) Whelen, Model: 60J000CR, backup lights, with flange, will be provided. Both lights will be installed with 6E or 64 flange kit.

REAR ID/MARKER DOT LIGHTING

The three (3) identification lights located at the rear will be installed per the following:

- Truck-Lite, model 33740R (3) lamp LED cluster recessed into the body.
- The center lights will be as close to the vertical centerline and as high as practical.
- Centers spaced not less than six (6) inches or more than twelve (12) inches apart.
- **Red** in color.
- All at the same height.

REAR ID/MARKER DOT LIGHTING

- Two (2) **red** Truck-Lite model 33050R, recessed LED lights, located as high and as close to the outside as possible facing the rear.
- Two (2) **red** Truck-Lite model 33050R, recessed LED lights, located at a minimum of 15" above the ground and as far to the rear as practical facing the side.
- Two (2) **red** reflex reflectors will be located on the rear of the truck facing to the rear. One (1) each side, as far to the outside as practical, at a minimum of 15", but no more than 60", above the ground.
- Two (2) **red** reflex reflectors will be located on the side of the truck facing to the side. One (1) each side, as far to the rear as practical, at a minimum of 15", but no more than 60", above the ground.

Per FMVSS 108 and CMVSS 108 requirements.

LICENSE PLATE BRACKET

There will be one (1) license plate bracket(s) mounted on the Standard Location. A Ri-Tar, Model M27, clear LED light will illuminate the license plate.

AUXILARY SIDE MARKER LIGHTS

A set of four (4) Ritar M27 LED marker lights will be installed on each side of the vehicle body, one behind the rear wheels, one ahead of rear wheels. All marker lights will be actuated with the headlight switch.

MARKER LIGHTS

There will be one (1) pair of **amber** and **red** LED marker lights with rubber arm, located at the rear of the body. The **amber** lens will face the front and the **red** lens will face the rear of the truck. These lights will be activated with the running lights of the vehicle.

LIGHT, INTERMEDIATE

There will be one (1) pair, of Truck-Lite, Model: 60115Y, **amber**, LED, turn signal, marker lights furnished, one (1) each side, horizontally in the rear fender panel. A stainless steel trim will be included with this installation.

"DO NOT MOVE APPARATUS" INDICATOR

A Whelen Model 800DLR **red** strobe indicator beacon, located in the driving compartment, will be illuminated automatically per the current NFPA requirements. The light will be labeled "Do Not Move Apparatus If Light Is On". The same circuit that activates the Do Not Move Apparatus indicator will activate a steady tone alarm when the parking brake is released.

DO NOT MOVE TRUCK MESSAGES

Messages will be displayed on the gauge panel LCD located forward of the steering wheel directly in front of the driver whenever the Do Not Move Truck light is active. The messages will designate the item or items not in the stowed for vehicle travel position (parking brake disengaged).

The following messages will be displayed (where applicable):

- Do Not Move Truck
- DS Cab Door Open (Driver Side Cab Door Open)
- PS Cab Door Open (Passenger's Side Cab Door Open)
- DS Body Door Open (Driver Side Body Door Open)
- PS Body Door Open (Passenger's Side Body Door Open)

Any other device that is opened, extended, or deployed that creates a hazard or is likely to cause major damage to the vehicle/apparatus if the vehicle/apparatus is moved will be displayed as a caution message after the parking brake is disengaged.

COMPARTMENT LIGHTING

All storage compartments will have On Scene Solutions LED compartment light strips. The lights will be sized to accommodate the compartment door opening. Opening the compartment door, will automatically turn the compartment lighting on.

PERIMETER SCENE LIGHTS, CAB

There will be a Truck-lite, model 44042C, 4.00", LED, grommet mount weatherproof light provided for each cab door. Lighting will be designed to provide illumination on areas under the driver and officer riding area exits, which will be activated automatically when the exit doors are opened, by the door jamb switch and by the same means as the body perimeter lights. The lighting will be capable of providing illumination at a minimum level of two (2) foot-candles on ground areas within 30.00" of the edge of the vehicle in areas which personnel climb in or out of the vehicle/apparatus or descend from the vehicle/apparatus to the ground level.

PERIMETER SCENE LIGHTS, BODY

There will be four body perimeter lights installed, one under each compartment, to activate with switch on DS switch panel and parking brake and reverse. These additional lights will be Truck-Lite, Model: 44042C, LED lights.

The lighting will be capable of providing illumination at a minimum level of two (2) foot-candles on ground areas within 30.00" of the edge of the vehicle/apparatus in areas designed for personnel to climb onto the vehicle/apparatus or descend from the vehicle/apparatus to the ground level. The lights will be activated by a parking brake control, transmission reverse activation and switch within reach of the driver.

12 VOLT LIGHTING

There will be one (4) Whelen Pioneer PFA2, LED floodlight(s) provided.

One on a bracket attached to the cab brow. One on each side and one mounted on the cab rear. Each light will produce a minimum of 5000 Lumens. This light's will be controlled from the driver side switch panel. These lights may be load managed when the parking brake is applied.

VIDEO SYSTEM, SAFETY VISION WITH COLOR DISPLAY

A Safety Vision video system with Model 620 color rear view and 622 color side view video cameras will be provided. All cameras feature a built in microphone, activated with the camera. Cameras will be on the passenger side of the cab activated with **the right turn signal** and at the rear of the vehicle, as close to center as possible, activated when the vehicle is put into reverse. Images will be displayed in the cab on the Pierce display provided. An amplified speaker with volume control permitting audio from the active camera will also be provided.

PASSENGER SIDE CAMERA MOUNT

A stainless steel bracket will be mounted to the roof of the cab to mount the passenger side camera.

GUARD, REAR BODY CAMERA

An aluminum tread plate guard will be fastened over the rear body camera to protect from damage and theft.

AIR HORN SYSTEM

Two (2) Grover air horns will be provided and located, in the front bumper, recessed one each side. The horn system will be piped to the air brake system wet tank utilizing .38" tubing. A pressure protection valve will be installed in-line to prevent loss of air, in the air brake system.

AIR HORN CONTROL

The air horns will be actuated by two (2) foot switches, one (1) located on the officer's side and one (1) on the driver's side.

ELECTRONIC SIREN

A Federal, model PA-300MSC, electronic siren with noise canceling microphone will be provided. Siren head will be located on a heavy duty swivel/tilt bracket mounted on the headliner so that it is accessible to both the driver and officer. The swivel bracket will be capable of rotating a minimum of 180 degrees. The bracket will allow the electronic siren head and one (1) additional piece of equipment to be installed. Siren will be actuated by one (1) foot switch located on the driver's side.

SPEAKER

There will be two (2) speakers provided. Each speaker will be a Federal, Model ES100, 100 watt. Each speaker will use a Federal, Model ESFMT-EF, recess mount with stainless steel grille. Each speaker will be connected to the siren amplifier. The speakers will be recessed in the front bumper on the driver's side.

SECONDARY WARNING SYSTEM

A Federal Rumbler, Model 689000-00, siren amp, secondary warning system, will be provided. The low frequency, vibrating tones will provide feel with emergency warning sound.

WARNING LIGHTS

A Whelen Freedom, Model FN**QLED light bar will be mounted on the cab roof. The length of the light bar will be 77.00"

The light bar will include the following:

- Six (6) **red** flashing forward facing LED modules.
- Two (2) **clear** flashing forward facing LED modules.
- Two (2) **red** flashing front corner LED modules.
- One (1) **red** flashing driver side facing LED module.
- One (1) **red** flashing officer side facing LED module.
- One (1) Opticom™, traffic light controller with National standard.

All lenses will be clear

Two (2) switches located in the cab on the switch panel will control this light bar.

- One (1) switch for the warning lights.
- One (1) switch for the traffic light controller.

To meet NFPA requirements the clear warning lights and the traffic light controller will be turned off when the parking brake is set.

SIDE ZONE LOWER LIGHTING

Six (4) Whelen model 60*02F*R flashing "Super" LED lights will be located at the following positions:

- Two (2) lights, one (1) each side on the bumper extension - **red** Super LED/clear lens each side.
- Two (2) lights, N/A - **red** Super LED/clear lens each side.

The lights will be controlled by a lighted switch on the cab instrument panel.

REAR ZONE LOWER LIGHTING

Two (2) Whelen model 60*02F*R flashing "Super" LED warning lights will be located at the rear of the vehicle, required to meet or exceed the lower level optical warning and optical power requirements of NFPA. The color of these lights will be **red** Super LED/clear lens. One (1) switch in the cab on the switch panel will control these lights. These lights will be installed with a flange.

WARNING LIGHTS (Rear)

There will be one (1) pair of Whelen 90**5FR flashing Super LED lights provided. The color of the lights shall be **amber** Super LED/clear lens. These lights will be located at the rear of the body each side high on rear compartment bulkheads, and activated with the rear warning switch. These lights will be installed with a flange.

WARNING LIGHTS INTERIOR CAB DOORS

There shall be an **amber** Whelen 500 light installed on each cab door located near the bottom of the door to the outward side of the door. The amber light shall activate when the cab door is open.

TRAFFIC DIRECTING LIGHT There will be one (1) Whelen Model TA870L 72.00" long x 3.75" high x 3.58" deep, **amber** LED traffic directing light installed at the rear of the vehicle. The Whelen model TACTLD1 control head will be included with this installation. The auxiliary warning mode will be activated with the control head only. This traffic directing light will be surface mounted at the rear of the vehicle/apparatus as high as practical. The traffic directing light control head will be located in the driver side overhead switch panel in the right panel position.

KUSSMAUL AUTO EJECT FOR SHORELINE

One (1) shoreline receptacle will be provided to operate the dedicated 120-volt circuits on the truck without the use of the generator. The shoreline receptacle (s) will be provided with a NEMA 5-20, 120 volt, 20 amp, straight blade Kussmaul auto eject plug with a **red** weatherproof cover. The cover is spring loaded to close, preventing water from entering when the shoreline is not connected. A solenoid wired to the vehicle's starter is energized when the engine is started. This instantaneously drives the plug from the receptacle. The shoreline will be connected to Battery Conditioner. **A mating connector body will also be supplied with the loose equipment.** The shoreline receptacle will be located on the driver side of cab, above wheel.

LOOSE EQUIPMENT

The following equipment will be furnished with the completed unit:

- One (1) bag of chrome, stainless steel, or cadmium plated screws, nuts, bolts and washers, as used in the construction of the unit.

- FIRE EXTINGUISHER 1 - 2.50 pound BC D.O.T approved fire extinguisher shall be shipped loose with the cab.
- ROAD SAFETY KIT 1-The cab and chassis shall include one (1) emergency road side triangle kit.

ENGINEERING CONFERENCE AND VEHICLE INSPECTION

The manufacture shall provide three separate trips to the factory to hold an engineering conference, a mid point inspection, and a final inspection. This is to include 4 people on each trip with a minimum of a two night stay. Each person will have their own hotel room.

Chassis Hook-Lift and Body Specification Section

HOOKLIFT CONTAINER HANDLING SYSTEM PALIFT MODEL T 40 L

The Howard County Fire Department has standardized on the Palfinger Model T-40L hook lift hoist. Thus there is no exception or substitution permitted on this critical part. The lift is to be supplied and installed on a sub frame then mounted to the awarded chassis frame aft of the cab. The lift shall feature a 40,000 lbs capacity rating, 48 degree dump angle; direct mount axial piston pump and tandem rear rollers. The system shall be controlled via a three lever 2-speed electric over air controller that shall be mounted in the cab which is required to be located within easy reach of the driver.

The hook lift hoist system shall be installed by the OEM of the system and in accordance with all DOT and FMVSS requirements.

The hook lift hoist system and sliding jib shall be painted in black urethane.

PALIFT MODEL T 40 L - BID SPECIFICATIONS

The following specifications describe the minimum requirements for a 40,000 lb. capacity hook lift roll off hoist. Features and details provided illustrate the safest, most efficient and lowest maintenance design.

LIFTING CAPACITY:	40,000 lb.
CONTAINER LENGTH:	16 - 22 ft. normal range
SUBFRAME HEIGHT	10.63"
DUMP ANGLE:	48 DEGREES
HOOK HEIGHT:	Dual series, 54" & 61.75" standard
INSTALLED WEIGHT:	4,840 lb.
MIN CHASSIS REQUIREMENT:	3 Axle, GVWR: 54,000 lb., CT: 170" - 180"

CONTAINER PICKUP RANGE:	Must be able to engage with a container at an angle of 30 degrees either side of center. Must be able to pick up a container 10" below grade. (Assuming a 41" chassis top of frame to ground height.)
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CONTAINER POSITION:	Unit to have capability to slide a container a minimum of 53" horizontally to accommodate short containers and achieve the most desirable weight distribution.
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CONTROLS:	In cab, dual lever, two speed, electric over air controls. Because of higher level of maintenance cable actuated controls are not acceptable. Additionally, because of potential for leakage into cab, hydraulic controls are not acceptable.
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HYDRAULIC SYSTEM:	All components to be designed to be compatible with 4,495 psi main relief pressure.
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PUMP:	Axial bent axis piston pump, rated 16.1 gpm @ 1,000 rpm & 5,000 psi. To include SAE B direct mount capability.
CONTROL VALVE:	Sectional valve, 2 spools with separate inlet and outlet covers, for ease of maintenance, to minimize repair costs and allow additional sections to be added. Valve to have power beyond capability.
RESERVOIR:	Minimum 26 gal. capacity with breather/strainer cap, sight level gauge and in tank 25 micron return line filter.
MAIN RELIEF PRESSURE:	4,495 psi
TIPPING CYLINDERS:	Two - 5.90" bore x 72.99" stroke, double acting. Tipping cylinder circuit to be equipped with double pilot actuated check valve.
SLIDING CYLINDER:	One - 3.94" bore x 53.19" stroke, double acting. Sliding cylinder circuit to be equipped with single pilot actuated check valve.
SAFETY INTERLOCK:	Hoist to be equipped with two proximity switches one to prevent actuation of the jib when operating in the dump mode and a second to confirm that the dump latches are fully engaged.
CONTAINER HOLD DOWNS:	Hoist to be equipped with passive, positive steel latches to lock the container into position during transporting and dumping. Use of springs or hydraulic locks is unacceptable.
PINS AND BEARINGS:	All pins shall be hardened. All points of rotation shall be equipped with bronze bushings and grease fittings. Because of short life expectancy, permanently lubricated bushings are unacceptable.
TIPPING FRAME:	The tipping frame must be locked to the hoist sub-frame when in the pick up mode to prevent possible free fall of the container.
REAR ROLLERS:	To minimize the unit loading on the container long members, hoist to be equipped with tandem rear rollers.
HYDRAULIC LINES & FITTINGS:	All hoses, tubes and fittings are to comply with SAE/JIC specifications. Steel hydraulic tubing is to be used in all locations that are practical. Lines must be anchored to prevent vibration related problems. Hoses and tubes to utilize 37 degree flare ends.
DUMP MODE:	For quieter and less severe operation, the hoist must be equipped with a soft stop feature that reduces the container lowering speed just prior to the container coming to rest on the hoist.
ELECTRICAL:	To prevent accidental control actuation or drain on the electrical system, the hoist will be energized only when the PTO is engaged.

REAR BUMPER:	Hoist to be capable of using a rigidly mounted rear bumper that will give compliance with the Federal and State laws in regards to container overhang.
SAFETY REQUIREMENTS:	Hoist design to comply with local, state and federal regulations related to safety.
MANUALS:	Each hoist shall include one manual that includes the following information: Operation Maintenance and troubleshooting Spare parts
WARRANTY:	Hoist to be warranted against defects for a period of 3 years on all structural components and 1 year on all other parts. Warranty period to start at the date of sale.

PAINT

The exterior custom cab and body painting procedure will consist of a seven (7) step finishing process as follows:

1. Manual Surface Preparation - All exposed metal surfaces on the custom cab and body will be thoroughly cleaned and prepared for painting. Surfaces that will not be painted include all chrome plated; polished stainless steel, anodized aluminum and bright aluminum tread plate. Each imperfection on the exterior metal surface will be removed or filled and then sanded smooth for a smooth appearance. All seams will be sealed before painting.
2. Chemical Cleaning and Treatment - The metal surfaces will be properly cleaned using a high pressure and high temperature cleaning system. Surfaces are chemically cleaned to remove all dirt, oil, grease and metal oxides to ensure the subsequent coatings bond well. An ultra pure water final rinse will be applied to all metal surfaces at the conclusion of the metal treatment process.
3. Primer/Surfacer Coats - A two (2) component urethane primer/surfacer will be hand applied to the chemically treated metal surfaces to provide a strong corrosion protective base coat and to smooth out the surface.
4. Hand Sanding - The primer/surfacer coat will be lightly sanded to an ultra smooth finish.
5. Sealer Primer Coat - A two (2) component sealer primer coat will be applied over the sanded primer.
6. Topcoat Paint - Urethane base coat will be applied to opacity for correct color matching.
7. Clearcoat - Two (2) coats of an automotive grade two (2) component urethane will be applied. Lap style doors will be clear coated to match the body. Roll-up doors will not be clear coated and the standard roll-up door warranty will apply.

All removable items such as brackets, compartment doors, door hinges, trim, etc. will be removed and painted separately to insure paint behind all mounted items. Body assemblies that cannot be finish painted after assembly will be finish painted before assembly. The cab and body will be two-tone, with the upper section painted Upper cab and body **90 red** and lower section of the cab and body painted lower cab and body **252 white**.

PAINTED CHASSIS FRAME ASSEMBLY

The chassis frame assembly will be painted **red** before the installation of the cab, body, engine, drive shafts and transmission assembly, air brake lines and electrical wire harnesses. The components included with the chassis frame assembly will be painted this color and are the frame rails, cross members, driveline, axles, suspension, steering gear, fuel tank, body substructure supports and miscellaneous mounting brackets.

FUEL TANK LINING

The fuel tank will be covered with "Line-X" spray on polyurethane material. The Line-X material will be **red** in color. The lining will be properly installed by an authorized Line-X dealer.

PAINT, COMPARTMENT INTERIOR

The compartment interior will be painted with a **gray spatter finish** for ease of cleaning and to make it easier to touch up scratches and nicks.

REFLECTIVE STRIPES

Three (3) reflective stripes will be provided across the front of the vehicle and along the sides of the body. The reflective band will consist of a 1.00" **gold** stripe at the top with a 1.00" gap then a 6.00" **ruby red** stripe with a 1.00" gap and a 1.00" **gold** stripe on the bottom. The reflective band provided on the cab face will be at the headlight level.

JOG(S) IN REFLECTIVE BAND

The reflective band located on each side of the vehicle body will contain one (1) jog(s) and will be angled at approximately a 45 degree "s" when installed.

REFLECTIVE STRIPE INSIDE CAB DOORS

A 4.00" reflective stripe will be provided inside two (2) cab doors, cab doors. The stripe will consist of 2.00" **red** Diamond Grade reflective material and 2.00" **fluorescent yellow green** reflective material Diamond Grade in a diagonal pattern.

REFLECTIVE STRIPE INSIDE RUBRAILS

A reflective stripe will be provided inside the extruded aluminum rubrails. The reflective material will be D.O.T. type Red/White stripe.

REFLECTIVE STRIPE, CAB DOORS, PROVIDED BY DEALER

NFPA 1901, 2009 edition, section 14.1.6 requires any door of the vehicle designed to allow persons to enter or exit the vehicle/apparatus will have at least 96 square inches of retroreflective material affixed to the inside of the door. The reflective material is not on the vehicle as manufactured. The dealer will provide and install the reflective material.

LETTERING

Forty-one (41) to sixty (60) reflective lettering, 3.00" high, outlining and shading will be provided.

LETTERING

Twenty-one (21) to forty (40) reflective letters, 6.00" high, with outline or shade, shade will be provided.

LETTERING

There will be eight (8) letters, 10.00" high, letter(s) provided. Each letter will be white in color with black outline and shade. The letters will be installed on front and rear.

LETTERING

A quantity of six (6) letters, 18.00" high gold reflective letter(s) with red outline and shade, will be installed on cab roof and roll up door.

PAINTED PLATE(S) FOR LETTERING

There will be one (1) painted aluminum plate(s) provided for department lettering. They will be mounted cab roof and will be as large as needed in size.

DECAL INSTALLATION

There will be one (1) pair of decals furnished by the fire department and applied by the vehicle manufacturer.

EMBLEM

A pair of emblems showing a firefighter will be installed on the vehicle. The emblem will be made with scotchlite. The size will be approximately 18.00" high x 18.00" wide.

OPTION –(1) Front Axle

The front axle will be of the independent suspension design with a ground rating of at least 22,800 pounds. Upper and lower control arms will be used on each side of the axle. Upper control arm castings will be made of 100,000-psi yield strength 8630 steel and the lower control arm casting will be made of 55,000-psi yield ductile iron. The center cross members and side plates will be constructed out of 80,000-psi yield strength steel. Each control arm will be mounted to the center section using elastomer bushings. These rubber bushings will rotate on low friction plain bearings and be lubricated for life. Each bushing will also have a flange end to absorb longitudinal impact loads, reducing noise and vibrations. There will be nine (9) grease fittings supplied, one (1) on each control arm pivot and one (1) on the steering gear extension. The upper control arm will be shorter than the lower arm so that wheel end geometry provides positive camber when deflected below rated load and negative camber above rated load. Camber at load will be zero degrees for optimum tire life. The kingpin bearing will be of low friction design and be sealed for life. Toe links that are adjustable for alignment of the wheel to the center of the chassis will be provided. The wheel ends will have little to no bump steer when the chassis encounters a hole or obstacle. The steering linkage will provide proper steering angles for the inside and outside wheel, based on the vehicle wheelbase. The axle will have a third party certified turning angle of 45 degrees. Front discharge, front suction, or aluminum wheels will not infringe on this cramp angle.

**EXHIBIT I
HOWARD COUNTY, MARYLAND
AGREEMENT**

THIS AGREEMENT made this ____ day of _____, ____, (the "Agreement") is by and between Howard County, Maryland, a body corporate and politic, (hereinafter "County") and [NAME AND ADDRESS OF CONTRACTOR], Federal Employer Identification Number (FEIN) XX-XXXXXXX, Telephone Number XXX-XXX-XXXX (hereinafter the "Contractor").

WHEREAS, the said Contractor, in consideration of the payments hereinafter specified and agreed to be made by said County, hereby covenants and agrees to Select One, in strict and entire conformity with the Attachment A entitled, Select One, and any Purchase Order subsequently issued and the Invitation for Bid No. Year-XX IFB TITLE and the response and any amendments or revisions thereto (collectively, the "Bid") attached hereto and incorporated herein.

NOW THEREFORE, in consideration of the mutual promises and covenants, the parties hereto agree that the County shall pay the Contractor, an amount as set forth herein, for Select One in accordance with this Agreement, the other attachments hereto, the Bid and the Purchase Order all of which are hereby incorporated into and made a part of this Agreement. Notwithstanding any other terms or provisions of this Agreement, in the event the County is temporarily or permanently prevented, restricted or delayed in the performance of any or all of the duties and obligations imposed upon or assumed by it hereunder, by act of the General Assembly of Maryland or the Howard County Council, by a court of competent jurisdiction or by administrative delay not due to the fault of the County (and its members and agents), the County shall not be liable directly or indirectly for any claims caused to or suffered by the Contractor or any other person in connection with or as a result of such prevention, restriction or delay. In addition the parties hereto agree as follows:

1 Contractor's Duties The Contractor shall be an independent Contractor and not an employee of the County, and shall be responsible for the reporting and remittance of all Federal and State taxes. The Contractor shall Select One outlined in Attachment A hereto. The Contractor's will be provided with due care and in accordance with all applicable standards. The Contractor shall Select One under the supervision of the ##### of the County, or his designee, who shall have authority to administer the Agreement.

2 Compensation

2.1 In consideration of the Select One to be provided by the Contractor, the County shall pay the Contractor as follows:

- in accordance with the unit prices set forth in the bid.
- in accordance with the Select One attached hereto as Attachment A.
- the sum of Dollar amount typed Dollars (\$Dollar amount Numerical)
- an hourly rate of \$0.00 per hour for an approximate total of number of hours typed hours and shall reimburse the Contractor for eligible expenses incurred by the Contractor in the performance of the Contractor's responsibilities and obligation under this Agreement. The eligible expenses are set forth in Attachment A.
- an amount equal to 90% of the amount invoiced pursuant to Paragraph 2.2 below. Ten percent (10%) of each disbursement shall be retained by the County and disbursed in a lump sum upon Select One in a manner satisfactory to the County, in its sole discretion.

2.2 The Contractor shall submit invoices to the County: Select One. The Contractor's invoices shall reflect the:

- 2.2.1 Contractor's name
- 2.2.2 Address
- 2.2.3 Federal tax identification number
- 2.2.4 Contract number (the first two digits are 44XXXXXXXXXX)
- 2.2.5 Purchase Order number (the first digit is 2XXXXXXXXXX)
- 2.2.6 Contract line number
- 2.2.7 Unit price and extended (the unit price must match a line on the contract)
- 2.2.8 Description of goods provided and/or services performed
- 2.2.9 A Form W-9 must be furnished to County along with the invoices.

2.3 The proper form of County invoices requires that the information enumerated above be included on all invoices. In order to facilitate prompt payment, invoices must contain the prescribed information in order to be successfully entered in to County's ERP system.

2.4 All invoices shall be submitted in triplicate to DEPARTMENT NAME AND ADDRESS. Invoices in the proper form and approved by the County shall be paid by the County within 30 days of receipt thereof.

2.5 Invoices failing to contain the information enumerated above may be returned for correction. The County reserves the right to approve such invoices, in its sole discretion, and to request such detail and additional information as the County, in its discretion deems appropriate.

3 Term

- 3.1 This Agreement shall be effective according to the following:
MONTH DATE, YEAR

OR

when executed by Howard County and shall continue through January 1, 2001, at which time the County may exercise its option to renew set forth in Paragraph 3.2 below, unless sooner terminated pursuant to Paragraphs 5 and 7 hereof.

3.2 The County reserves the right to renew this Agreement for INSERT RENEWAL PERIOD on the same terms and conditions set forth herein. Insert and changed to the terms i.e. Compensation. Unless set forth in a written amendment, the compensation, reimbursement and manner of payment set forth in Paragraph 2 shall remain as is. In the event any renewal changes the terms and conditions set forth herein, the approval of the Howard County Council may be required.

4 Contractor's Representations and Warranties The Contractor hereby represents the following:

4.1 The Contractor is a Select One, duly formed and validly existing under the laws of the State of INSERT STATE OF INCORPORATION and is qualified to do business and is in good standing in the State of Maryland.

4.2 The Contractor has the power and authority to consummate the obligations and responsibilities contemplated hereby, and has taken all necessary action to authorize the execution, delivery and performance required under this Agreement.

4.3 The person executing this Agreement for the Contractor warrants that s/he is duly authorized by the Contractor to execute this Agreement on the Contractor's behalf.

4.4 Select One: The services to be provided under this Agreement shall be performed competently and with due care, and in accordance with all applicable laws, codes, ordinances and regulations and licensing requirements. OR The goods to be delivered shall comply with the implied warranties of merchantability and fitness for use, and all express warranties created by this Agreement.

4.5 The Contractor has obtained and shall continue to maintain, at its own cost, such licenses and certifications as are necessary to provide the services rendered under this Agreement, and shall present such licenses to the County upon its request for the same.

4.6 All representations and warranties made in the Affidavit and the Bid response remain true and correct in all respects.

5 Termination

5.1 Termination for Convenience: The County may terminate this Agreement, in whole or in part, whenever the County determines that such termination is in the best interest of the County, without showing cause, upon giving at least 30 days written notice to the Contractor. The County shall pay all reasonable costs incurred by the Contractor up to the date of termination. However, in no event shall the Contractor be paid an amount which exceeds the price bid for the work performed. The Contractor shall

not be reimbursed for any profits which may have been anticipated but which have not been earned up to the date of termination.

5.2 Termination for Default: When the Contractor has not performed or has unsatisfactorily performed one or more material terms of the Agreement, the County may terminate the Agreement for default. Upon termination for default, payment may be withheld at the discretion of the County. Failure on the part of a Contractor to fulfill the contractual obligations shall be considered just cause for termination of the Agreement. If the damages exceed the undisbursed sums available for compensation, the County shall not be obligated to make any further disbursements hereunder. The Contractor will be paid for work satisfactorily performed prior to termination less any excess costs incurred by the County in reprocurring and completing the work.

6 Remedies for Default

6.1 The County shall have the right upon the happening of any Default, without providing notice to the Contractor:

- a. In addition to other available rights and remedies, to terminate this Agreement immediately, in whole or in part;
- b. To suspend the Contractor's authority to receive any undisbursed funds; and/or
- c. To proceed at any time or from time to time to protect and enforce all rights and remedies available to the County, by suit or any other appropriate proceedings, whether for specific performance of any covenant, term or condition set forth in this Agreement, or for damages or other relief, or proceed to take any action authorized or permitted under applicable law or regulations.

6.2 Upon termination of this Agreement for default, the County may elect to pay the Contractor for Select One up to the date of termination, less the amount of damages caused by the default. If the damages exceed the undisbursed sums available for compensation, the County shall not be obligated to make any further disbursements hereunder.

7 Remedies Cumulative and Concurrent No remedy herein conferred upon or reserved to the County is intended to be exclusive of any other remedies provided for in this Agreement, and each and every such remedy shall be cumulative, and shall be in addition to every other remedy given hereunder, or under this Agreement, or now or hereafter existing at law or in equity or by statute. Every right, power and remedy given to the County shall be concurrent and may be pursued separately, successively or together against the Contractor, and every right, power and remedy given to the County may be exercised from time to time as often as may be deemed expedient by the County.

8 Insurance The Contractor shall be required to provide insurance required by the County pursuant to the insurance requirements specified in this Invitation for Bids. The Contractor shall maintain the insurance coverages required by the County while this Agreement is in force, and provide documentation of such insurance in a form satisfactory to the County. Such documentation may, in the discretion of the County, be in the form of binders or declarations from the insurance company.

9 Confidential Information The Contractor shall not disclose any documentation and information disclosed to the Contractor in the course of its performance of duties hereunder with respect to the past, present and future County business, services and clients without the express written consent of the County.

10 Ethics

10.1 The Contractor certifies that the officer of the corporation who is executing this Agreement has read and understands Attachment B, entitled Howard County Charter and Code References to Ethics, which contains the provisions of Section 901(a) of the Howard County Charter dealing with conflicts of interest and Section 22.204 of the Howard County Code dealing with conflicts of interest.

10.2 The Contractor certifies that he/she has (1) not been a party to an agreement to bid a fixed or uniform price; (2) not offered nor will offer any gratuity to any county official or employee; and (3) not violated any of the fair employment provisions of Code Sec. 4.119 Ethics and Fair Employment Practices detailed in Attachment B.

11 Assignment Neither the County nor the Contractor shall assign, sublet or transfer its interest or obligations under this Agreement to any third party, without the written consent of the other. Nothing herein shall be construed to create any personal or individual liability upon any employee, officer or elected official of the County, nor shall this Agreement be construed to create any rights hereunder in any person or entity other than the parties of this Agreement.

12 Delegation of Duties The Contractor shall not delegate the Contractor's duties under this Agreement without the prior written consent of the County.

13 Indemnification.

13.1 The Contractor shall indemnify and hold harmless the County, its employees, agents and officials from any and all claims, suits, or demands including reasonable attorney fees which may be made against the County, its employees, agents or officials resulting from any act or omission committed in the performance of the duties imposed by and performed under the terms of this Agreement by the Contractor or anyone under agreement with the Contractor to perform duties under this Agreement. The Contractor shall not be responsible for acts of negligence or willful misconduct committed by the County, its employees, agents and officials.

13.2 Any property or work to be provided by the Contractor under this Agreement will remain at the Contractor's risk until written acceptance by the County; and the Contractor will replace, at the Contractor's expense, all property or work damaged or destroyed by any cause whatsoever.

14 Integration and Modification This Agreement sets forth the entire agreement between the parties relative to the subject matter hereof. No representation, promise or condition, whether oral or written, not incorporated herein shall be binding upon either party to this Agreement. No waiver, modification or amendment of the terms of this Agreement shall be effective unless made in writing and signed by an authorized representative(s) of the party sought to be bound thereby.

15 Governing Law This Agreement shall be governed by and construed in accordance with the laws of the State of Maryland without regard to any choice of law principles that would dictate the laws of any other jurisdiction. The parties agree that the exclusive venue for any and all actions related hereto shall be the appropriate Federal or State court located within the State of Maryland.

16 Conflicting Terms

16.1 The Contractor acknowledges that any Purchase Order issued on or after the effective date of this Agreement is hereby integrated and made a part of this Agreement, provided, however that if a conflict arises between the provisions of this Agreement and the Purchase Order, the provisions of this Agreement shall prevail.

16.2 In the event of a conflict between the Bid and this Agreement, the provisions of this Agreement (without the conflicting terms in the Bid) shall prevail.

17 Severability If any of the provisions in this Agreement are declared by a court or other lawful authority to be unenforceable or invalid for any reason the remaining provisions hereof shall not be affected thereby and shall remain enforceable to the full extent permitted by law.

18 Time is of the Essence Time is of the essence with respect to performance of the terms and conditions of this Agreement.

19 Funding The contractual obligation of the County under this Agreement is contingent upon the availability of appropriated funds from which payment for this Agreement can be made.

20 Ownership of Goods All finished or unfinished work, reports, or goods that are the subject of this Agreement including any licenses or consents acquired by the Contractor for performance hereunder, shall be and shall remain the property of the County.

21 Notice Any notice required to be delivered shall be deemed to have been received when the notice has been sent by certified mail, return receipt, overnight carrier, or hand delivered to the following address and individual or at such other address and/or such other individual a party may identify in writing to the other party:

FOR THE COUNTY: Contact Name, address and telephone number

FOR THE CONTRACTOR: Contact Name, address and telephone number

22 HIPAA. Compliance With Federal HIPAA And State Confidentiality Law.

A. The Contractor acknowledges its duty to become familiar with and comply, to the extent applicable, with all requirements of the federal Health Insurance Portability and Accountability Act (HIPAA), 42 U.S.C. §§ 1320 *et seq.* and implementing regulations including 45 CFR Parts 160 and 164. The Contractor also agrees to comply with the Maryland Confidentiality of Medical Records Act (Md. Code Ann. Health-General §§4-301 *et seq.*, MCMRA). This obligation includes:

1. As necessary, adhering to the privacy and security requirements for protected health information and medical records under federal HIPAA and State MCMRA and making the transmission of all electronic information compatible with the federal HIPAA requirements; and
2. Providing good management practices regarding all health information and medical records.

B. The County has determined that functions to be performed constitute business associate functions as defined in HIPAA, therefore, selected offeror must execute a business associate agreement as required by HIPAA regulations at 45 CFR §164.501 included herein as Attachment C. The fully executed business associate agreement must be submitted within 10 working days after notification of selection, or within 10 days after award, whichever is earlier. Upon expiration of the ten-day submission period, if the County determines that the selected offeror has not provided the HIPAA agreement required by this solicitation, the Purchasing Agent, upon review of the Howard County Office of Law, may withdraw the recommendation for award and make the award to the next qualified offeror.

C. Protected Health Information as defined in the HIPAA regulations at 45 CFR 160.103 and 164.501, as amended from time to time, means information transmitted as defined in the regulations, that is individually identifiable; that is created or received by a healthcare provider, health plan, public health authority, employer, life insurer, school or university, or healthcare clearinghouse; and that is related to the past, present, or future physical or mental health or condition of an individual, to the provision of healthcare to an individual, or to the past, present, or future payment for the provision of healthcare to an individual. The definition excludes certain education records as well as employment records held by a covered entity in its role as employer.

23 Wage Rate Requirements.The Contractor certifies that the officer of the corporation who is executing this Agreement has read and understands Invitation for Bids, Howard County Code, Sec 4.122A Wage Requirements.

24 No Waiver, Etc.No failure or delay by the County to insist upon the strict performance of any term, condition or covenant of this Agreement, or to exercise any right, power, or remedy consequent upon a breach thereof, shall constitute a waiver of any such term, condition, or covenant or of any such breach, or preclude the County from exercising any such right, power, or remedy at any later time or times.

[INSERT ANY SPECIAL CLAUSES HERE, SUCH AS WARRANTIES, LIQUIDATED DAMAGES ETC.]

sample

IN WITNESS WHEREOF, the parties have executed this Agreement the day and year first written above.

WITNESS: [INSERT LEGAL NAME OF CONTRACTOR]

Signature

Print Name: _____

By: _____

[Insert Name]

[Insert Title]

WITNESS: **HOWARD COUNTY, MARYLAND**, a body corporate and politic

Lonnie R. Robbins
Chief Administrative Officer

By: _____

Ken Ulman
County Executive

APPROVED FOR LEGAL SUFFICIENCY
this _____ day of _____, 2010:

Margaret Ann Nolan
County Solicitor

APPROVED FOR SUFFICIENCY OF FUNDS:

Sharon Greisz
Director of Finance

INFORMATION TECHNOLOGY APPROVED:

DEPARTMENT APPROVED:

Ira Levy
Director of Information Technology
and Communication Services

By: _____

[Insert Dept. Head Name]

[Insert Title]

ATTACHMENT A
SERVICES TO BE PERFORMED

The above are in addition to any other services set forth in the Bid.

sample

ATTACHMENT B

HOWARD COUNTY CHARTER AND CODE REFERENCES TO ETHICS

Charter Section 901. Conflict of Interest.

(a) **Prohibitions.** No officer or employee of the County, whether elected or appointed, shall in any manner whatsoever be interested in or receive any benefit from the profits or emoluments of any contract, job, work, or service for the County. No such officer or employee shall accept any service or thing of value, directly or indirectly, from any person, firm or corporation having dealings with the County, upon more favorable terms than those granted to the public generally, nor shall he receive, directly or indirectly, any part of any fee, commission or other compensation paid or payable by the County, or by any person in connection with any dealings with the County, or by any person in connection with any dealings with or proceedings before any branch, office, department, board, commission or other agency of the County. No such officer or employee shall directly or indirectly be the broker or agent who procures or receives any compensation in connection with the procurement of any type of bonds for County officers, employees or persons or firms doing business with the County. No such officer or employee shall solicit or accept any compensation or gratuity in the form of money or otherwise for any act or omission in the course of his public work; provided, however, that the head of any department or board of the County may permit an employee to receive a reward publicly offered and paid for, for the accomplishment of a particular task.

(b) **Rules of construction; exceptions by Council.** The provisions of this Section shall be broadly construed and strictly enforced for the purpose of preventing officers and employees from securing any pecuniary advantages, however indirect, from their public associations, other than their compensation provided by law.

In order, however, to guard against injustice, the Council may, by resolution, specifically authorize any County officer or employee to own stock in any corporation or to maintain a business in connection with any person, firm or corporation dealing with the County, if, on full public disclosure of all pertinent facts to the County Council by such officer or employee, the Council shall determine that such stock ownership or connection does not violate the public interest.

The County Council may, by ordinance, delegate to the Howard County Ethics Commission the power to make such determinations and to authorize the ownership or connection. Any ordinance which delegates this power shall provide for procedures including a public hearing, and shall establish criteria for determining when the ownership or connection does not violate the public interest.

(c) **Penalties.** Any officer or employee of the County who willfully violates any of the provisions of this Section shall forfeit his office. If any person shall offer, pay, refund or rebate any part of any fee, commission, or other form of compensation to any officer or employee of the County in connection with any County business or proceeding, he shall, on conviction, be punishable by imprisonment for not less than one or more than six months or a fine of not less than \$100.00 or more than \$1,000.00, or both. Any contract made in violation of this Section may be declared void by the Executive or by resolution of the Council. The penalties in this Section shall be in addition to all other penalties provided by law.

Code Section 4.119. Ethics and Fair Employment Practices.

(a) **Conflict of Interest.** Bidders, vendors, purchasers and county employees involved in the purchasing process shall be governed by the provisions of the Howard County Charter and Howard County law regarding conflict of interest. No vendor shall offer a gratuity to an official or employee of the county. No official or employee shall accept or solicit a gratuity.

(b) **Discouragement of Uniform Bidding.**

(1) It is the policy of the county to discourage uniform bidding by every possible means and to endeavor to obtain full and open competition on all purchases and sales.

(2) No bidder may be a party with other bidders to an agreement to bid a fixed or uniform price.

(3) No person may disclose to another bidder, nor may a bidder acquire, prior to the opening of bids, the terms and conditions of a bid submitted by a competitor.

(c) **Fair Employment Practices**

(1) Bidders, vendors and purchases may not engage in unlawful employment practices as set forth in Subtitle 2 "human Rights" of Title 12 of the Howard County Code Section 24 of Article 49B of the Annotated Code of Maryland or Sections 703 and 704 of Title VII of the Civil Rights Act of 1964 as amended. Should any bidders, vendors or purchasers engage in such unlawful employment practices, they shall be subject to being declared irresponsible or being debarred pursuant to the provisions of this subtitle.

(2) The Howard County Office of Human Rights shall notify the county purchasing agent when any bidder is found, by a court of competent jurisdiction, to have engaged in any high unlawful employment practices.

(3) If any bidder has been declared to be an irresponsible bidder for having engaged in an unlawful employment practice and has been debarred from bidding pursuant to this subtitle, the Howard County Office of Human Rights shall review the employment practices of such bidder after the period of debarment has expired to determine if violations have been corrected and shall, within 30 days, file a report with the county purchasing agent informing the agent of such corrections before such bidder can be declared to be a responsible bidder by the county purchasing agent.

(4) Payment of subcontractors. All contractors shall certify in writing that timely payments have been made to all subcontractors supplying labor and materials in accordance with the contractual arrangements made between the contractor and the subcontractors. No contractor will be paid a second or subsequent progress payment or final payment until such written certification is presented to the county purchasing agent.

Code Section 22.204. Prohibited Conduct and Interests.

(a) **Participation Prohibitions:** County official and employees subject to this subtitle shall not:

(1) Except in the exercise of an administrative or ministerial duty which does not affect the disposition or decision with respect to the matter, participate on behalf of the county in any matter which would, to their knowledge, have a direct financial impact as distinguished from the public generally, on them, their spouse, parent, child, sibling or upon any business interest with which they are affiliated;

(2) Except as exempted by the county council pursuant to Section 901(b) of the Howard County Charter, hold or acquire an interest in a business entity that has or is negotiating a contract with the county or is regulated by the official or employee;

(3) Except in the exercise of an administrative or ministerial duty which does not affect the disposition or decision with respect to the matter, participate in any matter involving a business entity with which they, their spouse, parent, child or sibling are negotiating or have an arrangement concerning prospective employment.

(b) **Employment Prohibitions:** Except as exempted by the county council pursuant to section 901(b) of the Howard County Charter or when the employment or interest does not create an actual or apparent conflict of interest, officials and employees shall not:

(1) Be employed by:

(i) Any entity subject to their official authority;

(ii) Any entity subject to the authority of the Howard County agency, board or commission with which they are affiliated;

(iii) Any entity which is negotiating or has entered into a contract with the Howard County agency, board or commission with which they are affiliated.

(2) Represent any party for a fee, commission or other compensation before any county body;

(3) Within one (1) year following termination of county service, act as a compensated representative of another in connection with any specific matter in which they participated substantially as a county official or employee.

The employment provisions listed above do not apply to:

(1) An official or employee who is appointed to a regulatory or licensing authority pursuant to a requirement that persons subject to its jurisdiction be represented in appointments to it;

(2) Subject to other provisions of law, a member of a board or commission who publicly disclosed a financial interest or employment to the appointing authority at the time of appointment;

(3) Employees or officials whose duties are ministerial, provided that the private employment or financial interest does not create a conflict of interest or the appearance of such a conflict.

(c) **Solicitation/Acceptance of Gifts or Compensation:** No employee or official shall solicit any gifts. No employee or official shall accept any gift or compensation, directly or indirectly from any person that he/she knows or has reason to know, has financial interests, distinguishable from the interest of the public, that would be affected by the actions of the employee or official.

(d) **Use of Prestige of Office:** No county officials or employees subject to this subtitle shall intentionally use the prestige of their office for their own gain or that of another. The performance of usual and customary constituent services without additional compensation does not constitute the use of prestige of office for an official or employee's private gain or that of another.

(e) **Disclosure of Confidential Information:** Other than in the discharge of official duties, officials or employees may not disclose or use, for their own gain or that of another, confidential information acquired by reason of public position and which is not available to the public.

ATTACHMENT C

BUSINESS ASSOCIATE AGREEMENT

This Business Associate Agreement is made this **type day spelled out** day of **type month spelled out**, 2009, between Howard County, Maryland, a body corporate and politic, (the County), and **type in Contractor** (the Contractor).

WHEREAS, pursuant to mandated compliance with the Health Insurance Portability and Accountability Act of 1996 (HIPAA), certain parties are required to enter into a Business Associate Agreement.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH THAT in consideration of the mutual promises contained herein and for other good and valuable consideration, including the mutual reliance of the parties on compliance with the terms and conditions of this Agreement, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree as follows:

PURPOSE AND SCOPE

A. The County and the Contractor enter into this Agreement for the purpose of ensuring compliance with the requirements of HIPAA and its implementing regulations (45 CFR Parts 160 and 164) and the Maryland Confidentiality of Medical Records Act (MCMRA).

B. This Agreement applies to the conduct of the Contractor in connection with protected health information anticipated to be provided to, collected, maintained or used by the Contractor in connection with its performance under the Primary Contract.

II. DEFINITIONS

A. The terms used in this Agreement have the meanings set forth in the Privacy Rule, 45 CFR Parts 160 and 164, and as set forth in subsection B of this section.

B. As used in this Agreement the following terms have the meanings indicated:

1. "County" means Howard County, Maryland.

2. "Designated Record Set" means a group of records maintained by or for the County that is (i) the medical records and billing records about individuals maintained by or for the County, (ii) the enrollment, payment, claims adjudication, and case or medical management record systems maintained by or for a health plan, or (iii) used, in whole or in part, by or for the County to make decisions about individuals. As used in this Agreement, the term "record" means any item, collection, or grouping of information that includes protected health information and is maintained, collected, used, or disseminated by or for the County. (45 CFR §164.501.)

3. "Disclosure" means the release, transfer, provision of, access to, or divulging in any other manner of information outside the entity holding the information. (45 CFR §160.103.)

4. "HIPAA" means the Health Insurance Portability and Accountability Act of 1996 (the Social Security Act, 42 U.S.C. 1320a-7(c)(a)(5), and 1320d-2 and 1320d-4.)

5. "Individual" has the same meaning as the term "individual" in 45 CFR § 160.103 and includes a person who qualifies as a personal representative in accordance with 45 CFR §164.502(g).

6. "MCMRA" means the Maryland Confidentiality of Medical Records Act, Md. Code Ann., Health-Gen., §4-301, et seq.

7. "Privacy Rule" means the Standards for Privacy of Individually Identifiable Health Information at 45 CFR Part 160 and Part 164, Subparts A and E.

8. "Protected health information" as defined in the Privacy Rule §§ 160.103 and 164.501, means information transmitted as defined in the regulations, that is individually identifiable; that is created or received by a healthcare provider, health plan, public health authority, employer, life insurer, school or university, or healthcare clearinghouse; and that is related to the past, present, or future physical or mental health or condition of an individual, to the provision of healthcare to an individual, or to the past, present, or future payment for the provision of healthcare to an individual. The definition excludes certain education records as well as employment records held by a covered entity in its role as employer. For purposes of this Agreement, protected health information is limited to the information created or received by the Contractor from or on behalf of the County.

9. "Required by law" means a mandate contained in law that compels an entity to make use or disclosure of protected health information, that is enforceable in a court of law, and includes but is not limited to the itemized activities set forth in 45 CFR §164.501.

10. "Use" means, with respect to individually identifiable health information, the sharing, employment, application, utilization, examination, or analysis of such information within an entity that maintains such information. (45 CFR § 164.501.)

III. PERMITTED USES AND DISCLOSURES BY CONTRACTOR

A. The Contractor agrees to use or disclose protected health information only as permitted or required by the Privacy Rule, this Agreement, or as otherwise required by law.

B. Except as otherwise provided in this Agreement, the Contractor may:

1. Use or disclose protected health information to perform functions, activities, or services for, or on behalf of, the County as specified in the Primary Contract, provided that the use or disclosure would comply with the Privacy Rule if done by the County, is consistent with the MCMRA, and complies with the County's privacy practices and procedures, if applicable.

2. Use protected health information for the proper management and administration of the Contractor or to carry out the legal responsibilities of the Contractor;

3. Disclose protected health information to a third party as necessary to carry out its obligations under the Primary Contract, for proper management and administration of the Contractor or to carry out the Contractor's legal responsibilities if:

a. the disclosure is required by law;

b. the Contractor obtains reasonable assurances from the third party to whom the information is disclosed that it will remain confidential and used or further disclosed only as required by

law or for the purpose for which it was disclosed to the third party; and

c. the third party notifies the Contractor of any instances of which it is aware in which the confidentiality of the information has been breached; and

4. Use protected health information to provide data aggregation services to the County as permitted by 45 CFR § 164.504(e)(2)(i)(B).

C. The Contractor may use protected health information to report violations of law to appropriate Federal and State authorities, consistent with 45 CFR § 164.502(a)(1).

IV. CONTRACTOR REQUIREMENTS

A. The Contractor agrees to implement appropriate safeguards to prevent use or disclosure of the protected health information other than as provided in Section III of this Agreement, including:

1. Limiting the amount of protected health information used or disclosed pursuant to Section III of this Agreement to the minimum necessary to carrying out the functions of the Primary Contract and to otherwise achieve the purposes of the use and disclosure;

2. Taking steps to protect the physical security of and prevent unauthorized access to the protected health information, furnishing the County with a written description of these steps, and allowing representatives of the County access to premises where the protected health information is maintained for the purpose of inspecting the physical security arrangements; and

3. Requiring each of its employees having involvement with protected health information to comply with applicable laws and regulations relating to confidentiality of protected health information, including the provisions of this Agreement and the Maryland Confidentiality of Medical Records Act.

B. The Contractor agrees to:

1. Mitigate, to the extent practicable, any harmful effect that is known to Contractor, of a use or disclosure of protected health information by Contractor in violation of the requirements of this Agreement;

2. Report to the County any use or disclosure of the protected health information not consistent with this Agreement of which it becomes aware within five (5) days of the time it becomes aware of the use or disclosure;

3. Ensure that any agent, including a subcontractor, agrees to the same restrictions and conditions that apply to the Contractor with respect to any protected health information provided to the agent that is received from, or created or received by Contractor on behalf of the County;

4. Provide access, at the request of the County, and in the time and manner directed by the County, to protected health information in a designated record set maintained by the Contractor, to the County or, as directed by the County, to an individual in order to meet the requirements under 45 CFR § 164.524;

5. Make any amendment(s) to protected health information in a designated record set maintained by the Contractor that the County directs or agrees to pursuant to 45 CFR §164.526 at the request of the County or an individual, and in the time and manner directed by the County;

6. Make available to the County, in a time and manner directed by the County or designated by it, any protected health information received from, or created or received by Contractor on behalf of the County, as well as any internal practices, books, and other records relating to the use and disclosure of protected health information, for purposes of determining the County's compliance with the Privacy Rule;

7. Document disclosures of protected health information and information related to such disclosures as would be required for the County to respond to a request by an individual for an accounting of disclosures of protected health information in accordance with 45 CFR § 164.528; and

8. Provide to the County or an individual, in time and manner directed by the County, information collected in accordance with subsection (7) of this section, to permit the County to respond to a request by an individual for an accounting of disclosures of protected health information in accordance with 45 CFR § 164.528.

C. Upon termination of the Primary Contract, the Contractor agrees that, except as provided in subsection V(C) of this Agreement, all of the protected health information provided by the County to the Contractor, or created or received by the Contractor on behalf of the County pursuant to the Primary Contract will be destroyed or returned to the County.

V. TERM AND TERMINATION

A. This Agreement shall be effective as of _____. It shall remain in effect unless otherwise terminated for the entire term of the Primary Contract including any extensions, options or modifications, or, as appropriate, in accordance with the requirements of paragraph (C) of this subsection.

B. Upon the County's knowledge of a material breach by Contractor, the County will either:

1. Provide an opportunity for the Contractor to cure the breach or end the violation and terminate this Agreement for cause if the Contractor does not cure the breach or end the violation within the time specified by the County;

2. Immediately terminate this Agreement for cause if the Contractor has breached a material term of this Agreement and cure is not possible; or

3. If neither termination nor cure is feasible, report the violation to the County head.

C. Effect of Termination of this Agreement.

1. Except as provided in paragraph 2 of this section, upon termination of this Agreement for any reason, the Contractor shall return or document the destruction of all protected health information received from the County, or created or received by the Contractor on behalf of the County. This provision shall apply to protected health information that is in the possession of subcontractors or agents of the Contractor. The Contractor shall retain no copies of the protected health information.

2. If the Contractor believes that returning or destroying the protected health information is infeasible, the Contractor shall provide to the County notification of the conditions that make return or destruction unfeasible. If the County agrees that return or destruction of protected health information is

unfeasible, the Contractor shall extend the protections of this Agreement to the protected health information and limit further uses and disclosures of the protected health information to those purposes that make the return or destruction infeasible, for so long as the Contractor maintains the protected health information.

D. The County's termination of this Agreement for cause pursuant to this subsection V may be viewed by the County as a breach of the Primary Contract and grounds for termination in accordance with the default termination clause of the Primary Contract.

VI. NOTICE PROVISIONS

Any notice required or permitted under this Agreement shall be in writing and hand delivered with receipt obtained therefore, or mailed, postage pre-paid, to the other parties by certified mail, return receipt requested to the following:

FOR THE SERVICE PROVIDER

Name
Title
Company Name
Address
City, State, Zip Code

FOR THE COUNTY

Name
Title
Address
City, State, Zip Code

VII. MISCELLANEOUS

A. A reference in this Agreement to a section in the Privacy Rule means the section in effect at time of execution and as amended from time to time thereafter.

B. The parties agree to take such action to amend this Agreement from time to time as is necessary for the County to comply with the requirements of the Privacy Rule and HIPAA.

C. The respective rights and obligations of the Contractor under Section V(C) of this Agreement shall survive the termination of this Agreement.

D. Any ambiguity in this Agreement shall be resolved to permit the County to comply with the Privacy Rule.

E. The parties agree that this Agreement shall not be assignable, except by written approval, in advance, by the County.

VIII. COMPLIANCE WITH STATE LAW

The Contractor acknowledges that by accepting the protected health information from the County, it becomes a holder of medical records information under the Maryland Confidentiality of Medical Records Act (Md. Code Ann., Health-Gen. §§4-301 et. seq.) and is subject to the provisions of that law. If the HIPAA Privacy Rule and the MCMRA conflict regarding the degree of protection provided for protected health information, the Contractor shall comply with the more restrictive protection requirement.

IN WITNESS WHEREOF, the parties hereby evidence their agreement to the above terms and conditions by having caused this Agreement to be executed, sealed and delivered the day and year first above written.

WITNESS:

[INSERT LEGAL NAME OF CONTRACTOR]

Signature

By: _____
[Insert Name]
[Insert Title]

Print Name: _____

WITNESS:

HOWARD COUNTY, MARYLAND, a body
corporate and politic

Lonnie R. Robbins
Chief Administrative Officer

By: _____
Ken Ulman
County Executive

APPROVED FOR LEGAL SUFFICIENCY
this _____ day of _____, 2010:

Margaret Ann Nolan
County Solicitor

APPROVED FOR SUFFICIENCY OF FUNDS:

Sharon Greisz
Director of Finance

INFORMATION TECHNOLOGY APPROVED:

Ira Levy
Director of Information Technology
and Communication Services

DOCUMENT D
PRICE PAGE NO. 1

TITLE Vehicle, Transporter for Platform On Demand (POD)

TO: HOWARD COUNTY OFFICE OF PURCHASING
6751 Columbia Gateway Drive, Suite 501
Columbia, MD 21046

The undersigned agrees to furnish and deliver the above goods and/or services in accordance with the specifications issued for same, and subject to all terms, conditions, and requirements in the solicitation, and in the various bid documents:

COMPANY NAME: _____

FEDERAL TAX IDENTIFICATION NO./SOCIAL SECURITY NO.: _____

ADDRESS: _____

(City) (State) (Zip Code)

TELEPHONE _____ FAX: _____

E-MAIL ADDRESS _____

Is the company a certified Minority-, Women-, or Disabled-Owned Business Enterprise? ☐ YES ☐ NO
If yes, indicate the type of minority ownership:

- | | | | |
|-------------------------------------------------|-------------------------------------------------|---------------------------------------------|----------------------------------------------|
| <input type="checkbox"/> American Indian Female | <input type="checkbox"/> Disabled Female | <input type="checkbox"/> Far Eastern Female | <input type="checkbox"/> Near Eastern Female |
| <input type="checkbox"/> American Indian Male | <input type="checkbox"/> Disabled Male | <input type="checkbox"/> Far Eastern Male | <input type="checkbox"/> Near Eastern Male |
| <input type="checkbox"/> Black Female | <input type="checkbox"/> Eskimo/Aleutian Female | <input type="checkbox"/> Hispanic Female | <input type="checkbox"/> White Female |
| <input type="checkbox"/> Black Male | <input type="checkbox"/> Eskimo/Aleutian Male | <input type="checkbox"/> Hispanic Male | |

If yes, indicate the certification(s) held:

- ☐ Howard County Government ☐ MD Dept. of Transportation ☐ City of Baltimore ☐ Other

Certification Number(s) and Expiration Date(s) _____

Does the company have a written non-discrimination policy which includes race, creed, religion, handicap, color, sex, national origin, age, occupation, marital status, political opinion, sexual orientation, gender identity and expression, personal appearance, familial status or source of income? ☐ YES ☐ NO

The County Purchasing Agent reserves the right to request such documentation, if desired, at a later date.

Delivery Time From Date of Award: _____
(This delivery time will be considered in determining the award.)

Payment Terms: _____ F.O.B. Destination, Inside Delivery

(The payment terms shall be considered net 30 days unless otherwise indicated. The payment terms will be considered in determining the award.)

The company will accept Visa procurement cards: ☐ Yes ☐ No

(Contractors are prohibited from charging any additional fees over and above their bid prices to process payments on procurements cards. This will be considered in determining the award.)

Howard County is exempt from all local, state, and federal taxes, and prices stipulated by the Contractor are considered maximum and are not subject to any increase due to any taxes, or any other reason. The County's Tax Exemption Number is 30001219.

☐ We wish to submit a "NO BID" at this time, but request that our company remain on the Contractors list for future solicitations.

TOTAL BID PRICE \$ _____

**THE PERSON SIGNING THE PRICE PAGE MUST INITIAL ANY
ALTERATIONS IN FIGURES IN INK.**

SIGNATURE: _____ DATE: _____

PRINTED NAME: _____ TITLE: _____

DOCUMENT D
PRICE PAGE NO. 2

TITLE: Vehicle, Transporter for Platform On Demand (POD)

NIGP CODE/PRODUCT CODE: 071-77

ITEM NO.	COMMODITY/SERVICE DESCRIPTION	ESTIMATED QUANTITY	U/M	UNIT PRICE (2 Decimal Places Only**)	EXTENDED PRICE
-------------	----------------------------------	-----------------------	-----	--------------------------------------------	-------------------

1.	Vehicle, Transporter for POD (paragraph #14)	1	Ea	\$_____	\$_____
----	----------------------------------------------	---	----	---------	---------

Engine: The chassis will be powered by a
Cummins electronic engine.

Transmission: Allison Gen IV model EVS
4000P, Electronic, torque converting,
automatic transmission.

Steering: Dual Shepard M110 steering gears,
with integral heavy duty power steering.

Anti-Lock Brake System: Wabco 6S6M

TOTAL BID PRICE* \$_____

* This figure should appear as Total Bid Price, Price Page No. 1

** Please note that prices shall only have **TWO DECIMAL PLACES**. The County's financial system will not
allow more than two decimal places, adjust responses accordingly.

INVOICE PROCEDURE FOR SUCCESSFUL CONTRACTORS:

In order to facilitate prompt payment, invoices must contain the above commodity and/or service descriptions and pricing to be successfully entered into the County's financial system. Invoices failing to contain the required line item detail, including contract line number and unit pricing, may be returned for correction. Please submit a sample invoice with the response.

COMPANY NAME: _____

DOCUMENT D

CONTRACTOR'S QUALIFICATION INFORMATION

Company Name: _____

1. References: Give name, address, telephone number of owner or manager of three accounts for which Contractor has provided Vehicle, Transporters for Platform On Demand (POD), during the past three years.

1.1.	Account Name	Contract Completion Date
	_____	_____
	Owner/Manager	Telephone
	_____	_____
	Address	Email
	_____	_____
	_____	_____
1.2.	Account Name	Contract Completion Date
	_____	_____
	Owner/Manager	Telephone
	_____	_____
	Address	Email
	_____	_____
	_____	_____
1.3.	Account Name	Contract Completion Date
	_____	_____
	Owner/Manager	Telephone
	_____	_____
	Address	Email
	_____	_____
	_____	_____

2. The Contractor has provided the above services for three years. (Note: three year minimum)

DOCUMENT E

**PURCHASE OF RECYCLED AND ENVIRONMENTALLY PREFERABLE
PRODUCTS, SERVICES AND EQUIPMENT**

(Must be completed, signed, and submitted with the bid.)

This documentation will assist the County in the maximizing the procurement of goods made from recycled, recyclable and environmentally preferred materials when such goods can be reasonably obtained or substituted for products made from virgin materials. Environmentally Preferred Products and Services are defined as products and services that have a lesser or reduced effect on human health and the environment when compared to competing products and services that serve the same purpose. This applies to raw material acquisition, as well as product manufacturing, distribution, use, maintenance and disposal.

Environmentally Preferred Products (EPPs) include, but are not limited to, recycled materials (asphalt, tires, paper), low or no VOC paint, non-toxic dyes, designated green certified cleaning products, low emission vehicles, etc. The County will give a percentage price preference not exceeding 5% for the purchase of environmentally preferable products (EPPs). The percentage price preference will not apply if doing so will cause a denial of Federal or State funding or is inconsistent with Federal or State law. For clarification of any terms used below, please contact the Office of Purchasing, (410) 313-6370.

The goods being bid:

- ☐ are made from recycled materials. Specify total recycled content and what was reused or recycled: _____
- ☐ represent ____% post-consumer waste.
- ☐ represent ____% pre-consumer waste.
- ☐ do not contain any recycled materials.
- ☐ have a 3rd party certification, such as EnergyStar, FSC, ISO 14000 series, Green Label, etc. Please provide dates of completion and certificate numbers as appropriate: _____
- ☐ are in the process of achieving 3rd party certification, such as EnergyStar, FSC, ISO 14000 series, Green Label, etc.
- ☐ have no 3rd party certification.

If the goods specified in this solicitation are new, could the County purchase remanufactured or reusable goods that would perform the same function equally to new goods? ☐ Yes ☐ No

If "yes", please provide specifics as to the remanufactured or reusable substitute goods, including prices for the remanufactured or reusable substitutes _____

If "no", please explain why not: _____

In the packaging of the goods for delivery to the County:

- ☐ recycled and recyclable packaging materials will be used.
- ☐ recyclable packaging materials will be used.
- ☐ no recycled or recyclable packaging materials will be used.

Does the company have an environmental (and/or social) responsibility statement? ☐ Yes ☐ No
The County Purchasing Agent reserves the right to request such documentation, if desired, at a later date.

DATE

SIGNATURE

DOCUMENT F
AFFIDAVIT

(Must be completed, signed, and submitted with the bid.)

Contractor _____

Address _____

Telephone _____ Bid Number _____

I, _____, the undersigned, _____ of the above named Contractor
does (Print Signer's Name) Print Office Held)

declare and affirm this _____ day of _____, _____, that I hold the aforementioned office in the
(Month) (Year)

above named Contractor and I affirm the following:

AFFIDAVIT I

The Contractor, his Agent, servants and/or employees, have not in any way colluded with anyone for and on behalf of the Contractor or themselves, to obtain information that would give the Contractor an unfair advantage over others, nor have they colluded with anyone for and on behalf of the Contractor, or themselves, to gain any favoritism in the award of the contract herein.

AFFIDAVIT II

No officer or employee of Howard County, whether elected or appointed, has in any manner whatsoever, any interest in or has received prior hereto or will receive subsequent hereto any benefit, monetary or material, or consideration from the profits or emoluments of this contract, job, work or service for the County, and that no officer or employee has accepted or received or will receive in the future a service or thing of value, directly or indirectly, upon more favorable terms than those granted to the public generally, nor has any such officer or employee of the County received or will receive, directly or indirectly, any part of any fee, commission or other compensation paid or payable to the County in connection with this contract, job, work, or service for the County, excepting, however, the receipt of dividends on corporation stock.

AFFIDAVIT III

Neither I, nor the Contractor, nor any officer, director, or partners, or any of its employees who are directly involved in obtaining contracts with Howard County have been convicted of bribery, attempted bribery, or conspiracy to bribe under the laws of any state, or of the federal government for acts of omissions committed after July 1, 1977.

AFFIDAVIT IV

Neither I, nor the Contractor, nor any of our agents, partners, or employees who are directly involved in obtaining contracts with Howard County have been convicted within the past 12 months of discrimination against any employee or applicant for employment, nor have we engaged in unlawful employment practices as set forth in Section 12.200 of the Howard County Code, or of Section 16 of Article 49B of the Annotated Code of Maryland or, of Sections 703 and 704 of Title VII of the Civil Rights Act of 1964.

I do solemnly declare and affirm under the penalties of perjury that the contents of the foregoing affidavits are true and correct to the best of my knowledge, information and belief.

DATE

SIGNATURE

PRINTED NAME

TITLE

DOCUMENT G

EQUAL BUSINESS OPPORTUNITY PARTICIPATION

NOTICE TO PRIME CONTRACTORS 10% SUBCONTRACTING GOAL ON CONTRACTS VALUED AT \$50,000 OR MORE

Howard County Code Section 4.122 established an Equal Business Opportunity program to foster overall equity and fairness to all citizens in relation to business enterprises conducting business with the County.

If a total contract award is \$50,000 or more, the Prime Contractor shall make a genuine good faith effort to comply with the Howard County Equal Business Opportunity (EBO) program's 10% subcontracting goal. The Prime Contractor shall make a good faith effort to obtain minority subcontractor participation even if the Prime Contractor has the capability to complete the work with its own workforce. This good faith effort is also applicable to Prime Contractors who are themselves minority-owned firms. The percentage requirement may vary if the contract is funded by a federal or state agency. Prime Contractors shall submit the following completed *Equal Business Opportunity Schedule of Participation with the bid*. While the County requests that Contractors identify their subcontractors at the time bids are submitted; the County acknowledges that sometimes Contractors may need to change their subcontractor(s). Changes in subcontractors may be made by providing written notification to the Office of Purchasing EBO Coordinator, of the change prior to award. After contract award, changes in subcontractors require written approval of the Office of Purchasing EBO Coordinator.

Possible areas of obtaining subcontracting participation include, but are not limited to, flagging services, hauling, copying and printing, and the purchase of materials used in performing the contract. Contractors may use minority, women or disabled business enterprises certified by Howard County, Maryland; the Maryland Department of Transportation; the City of Baltimore, Maryland; or another certifying entity in order to satisfy the 10% subcontracting goal. The website addresses for lists of minority businesses are:

http://www.howardcountymd.gov/Purchasing/Purchasing_EBO.htm
http://www.mdot.state.md.us/MBE_Program/index.html
<http://cityservices.baltimorecity.gov/mwboo>

PRIME CONTRACTOR INVOICING REQUIREMENTS

Prime Contractors shall use the following County standard *Invoice* that will record EBO participation. If there is no EBO participation in a particular billing cycle due to the nature of the goods or services provided, that must be noted on the invoices as well. Even though Prime Contractors may have their own invoice forms, the County's form must be used, either in place of or in addition to the Contractor's invoice form, so that County can track compliance of EBO participation in a standard and consistent manner. The form is available for download on the Office of Purchasing web site at www.howardcountymd.gov/purchasing.

Prime Contractors failing to achieve the EBO program goal following a good faith effort to obtain participation must complete the *Equal Business Opportunity Program Request for Subcontracting Waiver* (available from the Office of Purchasing) and provide documentation of its good faith attempts to obtain EBO participation. The County will determine if the efforts made satisfy a good faith attempt. A waiver

will only be considered in rare contracts after a determination that the Prime Contractor has made a good faith effort and thoroughly documented the efforts.

If the County exercises its option to renew the contract for another one-year term, it is expected that the EBO subcontracting goal will be met for each subsequent contract year when the contract amount is \$50,000.00 or more. Questions relating to the EBO program shall be directed to Jacqueline Donaldson-Grey, at jgrey@howardcountymd.gov or 410-313-6370.

SUBCONTRACTOR REPORTING REQUIREMENTS

Successful Prime Contractors shall provide their subcontractors with the following *Subcontractor Monthly Payment Report*. This report must be submitted by the 10th of each month by the subcontractor even if there has been no payment/work performed for the preceding billing cycle to the Office of Purchasing unless otherwise specified. The form is available for download on the Office of Purchasing web site at www.howardcountymd.gov/purchasing.



**HOWARD COUNTY, MARYLAND
EQUAL BUSINESS OPPORTUNITY (EBO)
SCHEDULE OF PARTICIPATION**

COUNTY USE ONLY
CONTRACT NAME: <u>Vehicle, Transporter for Platform On Demand (POD)</u>
Solicitation /Project#: <u>IFB#2010-63</u> PO#: _____ Contract Renewal #: _____
Contract Amount: _____ Contract Term: _____ EBO APPROVAL: _____
PRIME CONTRACTOR
CONTRACTOR NAME: _____
Address: _____
Contact Representative: _____ Phone: _____
Email: _____ EBO Status (Y/N): _____ EBO TYPE*: _____
Certifying Agency: _____ Certification #: _____ Contract Amount: \$ _____
COUNTY USE ONLY Amount: _____ Date: _____
EBO SUBCONTRACTOR
CONTRACTOR NAME: _____
Address: _____
Contact Representative: _____ Phone: _____
Email: _____ EBO Status (Y/N): _____ EBO TYPE*: _____
Certifying Agency: _____ Certification #: _____ % Participation: _____
Services to be performed: _____
COUNTY USE ONLY Amount: _____ Date: _____
EBO SUBCONTRACTOR
CONTRACTOR NAME: _____
Address: _____
Contact Representative: _____ Phone: _____
Email: _____ EBO Status (Y/N): _____ EBO TYPE*: _____
Certifying Agency: _____ Certification #: _____ % Participation: _____
Services to be performed: _____
COUNTY USE ONLY Amount: _____ Date: _____

Signature (Vendor Official)_____
Date_____
Title

*EBO TYPES: EAF/EAM=*Eskimo/Aleutian*
 FF/FM=*Asian Pacific Islander*
 WF=*White Female*

BF/BM=*Black*
HF/HM=*Hispanic*

DF/DM=*Disabled*
NF/NM=*Near Eastern*

EHB:kea

PRIME CONTRACTOR INVOICING REQUIREMENTS PART ONE



Howard County, Maryland
Office of Purchasing

INVOICE

EQUAL BUSINESS OPPORTUNITY (EBO) SUBCONTRACTOR PARTICIPATION

The County's EBO Program requires either an on-site review or documentation to be provided to ensure EBO Subcontracting Participation. To assist in the documentation of your firm's participation and compliance with Howard County's EBO goals, **this form is designed to replace your standard invoice or to accompany your invoice for payment** from Howard County, Maryland. **Both pages of this form need to be completed for payment processing as well as a COPY of this form sent to THE OFFICE OF PURCHASING, 6751 COLUMBIA GATEWAY DR., STE 501, COLUMBIA, MD 21046, ATTN: JACKIE DONALDSON-GREY or jgrey@howardcountymd.gov.**

Bill To:	Purchase Order or Suborder No.: <i>(issued from Howard County)</i>	Original Contract Amount: <i>(issued from Howard County)</i>	_____ \$0.00
User Agency: _____	_____		
Street Address: _____		Total Contractor Amount Billed to Date: <i>(includes this month's bill)</i>	_____ \$0.00
City, ST, Zip: _____	Contract Title: <i>(issued from Howard County)</i>		
Phone Number: _____	_____		
From:	For the Period of: _____	Total Amount Paid to Contrator:	_____ \$0.00
Company Name: _____	<input type="checkbox"/> Partial Payment <i>(against referenced PO/SO# above)</i>	Balance Due to Contractor: <i>(this month's bill)</i>	_____ \$0.00
Street Address: _____	\$0.00		
City, ST, Zip: _____	<input type="checkbox"/> Final Payment <i>(against referenced PO/SO# above)</i>	Percent of Work Completed to Date:	_____ 0%
Phone Number: _____	\$0.00		

Quantity	Description of Goods Delivered/Services Performed for Howard County	Unit Price	Total
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
	Tax	\$0.00	\$0.00
Tax - Sales Tax Exemption No. 30001219		Total	0.00

PRIME CONTRACTOR INVOICING REQUIREMENTS PART TWO



Howard County, Maryland

Office of Purchasing

INVOICE

EQUAL BUSINESS OPPORTUNITY (EBO) SUBCONTRACTOR PARTICIPATION

EBO Subcontractor

Company Name: _____
 Street Address: _____
 City, ST, Zip: _____
 Phone Number: _____

* **REMINDER:** EBO SUBCONTRACTORS ALSO REPORT THEIR PARTICIPATION TO THE OFFICE OF PURCHASING MONTHLY ON THE COUNTY'S STANDARD FORM THAT REQUIRES ITEMIZED INVOICES. CONTACT THE EQUAL BUSINESS OPPORTUNITY COORDINATOR IN THE OFFICE OF PURCHASING, WITH EBO PARTICIPATION QUESTIONS AT (410) 313-3694.

EBO Participation Goal: 0% or _____ \$0.00

(from the EBO Participation Form)

Total EBO Amount Billed to Date: _____ \$0.00

(includes this month's bill)

Total Amount Paid to EBO Subcontractor: _____ \$0.00

Balance Due to EBO Subcontractor: _____ \$0.00

(this month's bill)

Total Percent EBO Participation Goal to Date: _____ 0%

Invoice# from EBO Subcontractor	Date of Invoice	Description of Invoice	Total Invoice Amount	Amount Paid to EBO SubContractor
Total			\$0.00	\$0.00

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief, the work covered by this invoice has been completed in accordance with the contract and that the current payment shown herein is now due.

 Prime Contractor Authorized Signature

 Date

SUBCONTRACTING REPORTING REQUIREMENTS



Howard County, Maryland
Office of Purchasing

SUBCONTRACTOR'S MONTHLY PAYMENT REPORT EQUAL BUSINESS OPPORTUNITY (EBO) SUBCONTRACTOR PARTICIPATION

Howard County Office Of Purchasing
Attn: EBO Coordinator
6751 Columbia Gateway Drive, Suite 501
Columbia, MD 21046
Fax: (410) 313-6388

QUESTIONS SHOULD BE DIRECTED TO:
Jackie Donaldson-Grey
Equal Business Opportunity Coordinator
Phone: (410) 313-3694
Email: jgrey@howardcountymd.gov

Your firm has been identified as an EBO Subcontractor for **FILL IN PRIME CONTRACTOR** for **CONTRACT TITLE**. To ensure EBO Subcontracting Participation and compliance, you must complete this form and forward via, mail, fax or email to the Office of Purchasing, Attn: Jackie Donaldson-Grey.

Due by the 10th of Each Month for the Preceding Month

From:

Company Name: _____
Street Address: _____
City, ST, Zip: _____
EBO/MBE Certification #: _____
Services to be Performed: _____

Contact Person: _____
Email Address: _____
Phone Number: _____
Fax Number: _____

For the Period of: _____ **2009**

Original Contract Amount: _____
(issued from Howard County) **\$0.00**

EBO Participation Goal: 0% = _____ **\$0.00**
(from the EBO Participation Form)

Invoice# to Prime Contractor	Date of Invoice	Total Invoice Amount	Date Payment was Received	Amount Received from Prime Contractor
Total				\$0.00

Prime Contractor

Company Name: _____
Street Address: _____
City, ST, Zip: _____

Contact Name: _____
Email Address: _____
Phone Number: _____

Authorized Signature

Date

**DOCUMENT H
HOWARD COUNTY, MARYLAND
WAGE RATE REQUIREMENTS FOR SERVICE CONTRACTS
EXEMPTION STATUS**

Subtitle 1, Section 4.122A(b)(2)
(Must be completed, signed, and submitted with bid)

I. PART 1

Solicitation No.: 2010-63

Solicitation Title: Vehicle, Transporter for Platform On Demand (POD)

Please check all that apply. If none of the following statements apply to the company please sign below and continue to Part 2.

Prime Contractor	SubContractor	
<input type="checkbox"/>	<input type="checkbox"/>	The Contractor employs fewer than five (5) employees at any time during the contract term.
<input type="checkbox"/>	<input type="checkbox"/>	The Contractor received less than \$100,000 from the County in the most recent 12-month period prior to the contract start date; and will be entitled to receive less than \$100,000 from the County within the next 12-month period.
<input type="checkbox"/>	<input type="checkbox"/>	The Contractor is a public entity.
<input type="checkbox"/>	<input type="checkbox"/>	The Contractor is a nonprofit organization that has qualified for an exemption from federal income taxes under Section 501(c)(3) of the Internal Revenue Code.
<input type="checkbox"/>	<input type="checkbox"/>	The Contractor participates in a contract awarded under Code Secs.4.110 (Sole Source), 4.111 (Emergency), or 4.112 (Expedited).
<input type="checkbox"/>	<input type="checkbox"/>	The Contractor is a regulated public utility.
<input type="checkbox"/>	<input type="checkbox"/>	The Contractor is expressly precluded from complying with Section 4.122A by the terms of any federal, state or County law, federal or state contract or grant and the contract falls within the extent of that preclusion.
<input type="checkbox"/>	<input type="checkbox"/>	The contract has been awarded under a cooperative procurement with another government or organization of governments.

NOTE: The wage requirements do not apply to an employee: (1) who performs no measurable work related to any contract with the County; (2) who participates in a government-operated or government-sponsored program that restricts the earnings of or wages paid to employees to a level below the wage required under the law; (3) who participates for not longer than 120 days in a calendar year in a government-operated or government-sponsored summer youth employment program; (4) for whom a different wage rate is expressly set in a collective bargaining agreement; or (5) for whom a higher wage is required by a federal, state, or County law.

Please check here if none of the above is applicable

☐

Contractor Name: _____

Date: _____

Authorized Signature: _____

(Typed Name of Signatory)

DOCUMENT H
HOWARD COUNTY, MARYLAND
WAGE RATE REQUIREMENTS FOR SERVICE CONTRACTS
CERTIFICATION

Subtitle 1, Section 4.122A(b)(2)
(Must be completed, signed, and submitted with bid)

PART 2

Solicitation No.: 2010-63

Solicitation Title: Vehicle, Transporter for Platform On Demand (POD)

I do hereby certify that I have read and understand the provisions of Section 4.122A of the Howard County Code, am an authorized representative of the Contractor named below and:

- ☐ As a "covered employer" the Contractor and all subcontractors will comply with the County's Wage Rate Requirements for Service Contracts (Howard County Code Section 4.122A) and pay all employees not exempt under the wage requirements, and who perform direct measurable work for the County, the applicable wage requirements at the time the work is performed. The Contractor will keep the records necessary to show compliance and will submit such records to the Purchasing Agent on request of the Purchasing Agent; and will publicize the requirements of this law to any employees who may be covered by the law.
- ☐ Contractor's bid includes sufficient funds to meet these requirements.
- ☐ The per employee hourly cost of the premium for health insurance to an employee who provides services to the County that appears in the bid is correct.

Contractor Name: _____		Vendor Identification No. _____	
Address: _____			
Telephone No: _____		Fax No.: _____	E-mail: _____
Authorized Representative: _____			
Signature	Typed Name of Signatory	Title	Date

Howard County, Maryland
Office of Purchasing
6751 Columbia Gateway Drive, Suite 501
Columbia, MD 21046
(410) 313-6370

REVISED 05/08/10